**DOCUMENT RESUME**

ED 167 676 UD 019 182

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|---|---|
| AUTHOR | Macaranas, Federico M. |
| TITLE | Education and Income Inequality: The Case of Young Filipino Americans. |
| INSTITUTION | Manhattan Coll., Bronx, N.Y. School of Business Research Inst. |
| PUB DATE | Dec 78 |
| NOTE | 79p.; Not available in hard copy due to reproduction quality of the original document |
| EDRS PRICE | MF-$0.83 Plus Postage. HC Not Available from EDRS. |
| DESCRIPTORS | *Access to Education; Demography; Educational Attitudes; *Enrollment Influences; *Enrollment Trends; Family Income; *Filipino Americans; Motivation; Social Attitudes; *Socioeconomic Influences; Socioeconomic Status |

ABSTRACT

This paper analyzes the macro relationships among education, income, and related socio-economic variables pertaining to young Filipino Americans. Probable reasons underlying the relatively low school enrollment of this ethnic group are examined. In addition, multiple regression models are utilized to explain differences in schooling enrollment patterns among the Filipino, Chinese, and Japanese communities in the United States. The same problem is also examined from a microperspective. Multiple regression models are again used to examine attitudinal variables, demographic variables, and factors motivating education. Appendices include supporting tables for both the macro and micro profiles and a sample questionnaire: "A Survey of Educational Attitudes and Work/Income Opportunities Perceptions of Young Filipino Americans, Fall 1977." A list of references is also provided. (Author/EB)

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# EDUCATION AND INCOME INEQUALITY:

# THE CASE OF YOUNG FILIPINO AMERICANS*

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December, 1978

UD019182

* This research was supported by the Scholar-in-Residence Program of the Asian American Mental Health Research Center, based on the proposal submitted by the Philippine Forum of New York, Inc., and by a Manhattan College Summer Grant (1978).

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## CORRECTIONS

Pages 4 and 5 have been wrongly numbered.

Page 15 : %WTSWL in MEDINC, Filipinos, should be -1.16

Page 16 : First paragraph, last line -- "its influence in occupation" should read "its influence on occupation"

Page 21 : First paragraph, fourth to the last line -- "There are three more males..." should read "There are two more males..."

Page 24 : Change the last paragraph completely to the following --

(2) From Table III (or Table IV respectively), BIRTHPLA appears in 8 (or 9) cases. SEX has 6 observations in Table III and 4 in Table IV. With five observations each in Table III CSTAT has six and WJOB has four in Table IV. INSCHL and RUR-URB have two each (two and four,

Page 28 : Factors Motivating Education, first sentence, second line -- "...implies a more positive rather than a..."

EDUCATION AND INCOME INEQUALITY: THE CASE OF YOUNG FILIPINO AMERICANS

## Introduction

The reduction of social inequalities through education is one basic tenet in meritocratic- and democratic-minded communities that is thought to have been continuously sharpened by the experience of several waves of migration into the U.S. For example, the difference in economic achievement between 19th-century Irish and Jewish migrants has been traced by Sowell(1975, p. 71) to the "reverence for learning" of the latter -- in turn the consequence of their urban and commercial background that stand in sharp contrast to the rural and unskilled peasant roots of the former. It has been observed that Jewish immigrants crowded the public schools and libraries while such free education were neglected by many 19th century immigrant groups.

The traditional peasant culture and the resulting barrier to higher education in Southern Italy is also used by Sowell to explain the material gap between the second wave of Italian immigrants to the U.S. compared to the bulk of the first wave in the 1870's who were from the more economically and educationally advanced northern part of the country. The same peasant background of most 20th century Latin immigrant groups -- the notable exception being West Indian Negroes -- places a low value on education (evidenced by higher dropout rates and attendance in easier colleges and courses according to Sowell, p. 164) leading to relatively depressed incomes and living conditions.

In the past decades however, social scientists have increasingly questioned the posited conventional relationship between education and socio-economic equality. Cultural deficit, IQ deficit and teacher expectations theories were formulated (Persell, 1977) to explain the failure of education to generate socio-economic equality. A whole

new field, the economics of discrimination, based on the idea of human capital which later branched off into a separate research area, was born in the late 1950's in attempts to explain large and persistent wage differentials between racial groups. (Becker, 1957; Marshall, 1974; Schultz ,1963 ) In turn, segmented labor market critics of the human capital theories developed in the 1960's have questioned the efficacy of education and training programs to cure poverty; for example, Cain (1976, p. 128) cites a number of controversial points in the literature arising from the famous "Coleman Report."

Among these critics are those who accept the "screening hypothesis" or "credentialism", i.e., those who argue that the process of hiring workers is essentially the problem of selecting buyers and sellers in the presence of inadequate information about their characteristics. (Blaug, 1976, p. 833). A leading proponent in this area is Thurow who has consistently asked and tried to answer why educational attainment distributional variances have narrowed down while that of income has not. (Thurow, 1975)

In the context of Asian-Americans, researchers are carefully dissecting a "model minority" image into which these recent migrants have been stereotyped. E.g., despite their having the highest incomes and years of schooling among the minority groups in the US, in fact surpassing whites in most cases, Asian Americans have not been assured upward mobility in various occupations (Suzuki, 1977; Ng, 1977; Kalayaan Editorial Collective, in Tachiki, Wong, Odo and Wong, 1971; Kim, 1973).

Along these lines, it is quite cogent to note a major problem of young Filipino Americans (18-24 years); based on the 1970 census of population, their national enrollment rates (28% for males, 23%

for females) are far short of the national US averages for all persons (37%, males; 27%, females), the Chinese (71%, males; 58%, females), and the Japanese (56% males: 48%, females).

This is especially disturbing when two facts are dovetailed. First, the Filipino community in the US has higher median years of schooling than the whole population in the 25 years and above age bracket (12.2 years vs. 12.1 for the entire US) or even the 25-44 years group (13.0 years vs. 12.4 for the entire US).

Second, there is in fact a positive relationship between intergenerational income differences and intergenerational educational differences within any migrant group in the U.S. (Macaranas, 1977).[1] This is strongest for Russians and Poles, and even in the case of Germans, a group where second generation median income is smaller than the first generation's, the schooling variable suggests a positive relation as hypothesized.

These facts imply that the new wave of Filipino Americans must achieve more years of schooling than their parents if they are to surpass the latter's incomes - which are already relatively lower than the US average ($9,318 for Filipinos; $9,590 US median incomes of families).

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[1] Alternatively, there is a statistically significant earning capability of later generations and those with greater schooling. Using cross-section data for 1970,

$$\underset{(0.443)}{\text{MEDINC} = 1010.38} + \underset{(1.507)}{997.32\ \text{GENDUMMY}} + \underset{(3.698)}{741.86\ \text{MEDSCH (25-44 YRS)}}$$

The coefficients are significant at less than 10% level for the generation dummy variable and at less than 5% for the median school years completed by those in the age cohort 25-44 years. The numbers in parenthese are the t-values.

Similarly, the low enrollment rate is surprising in view of the deeply-rooted educational tradition of Filipinos[2] and recent findings that Asian Americans have high motivational drives for education (Boardman, Davis and Sanday, 1977). The latter conclusion is derived from the Equality of Educational Opportunity survey data of 12th grade students across the country conducted in the mid 1960's. The authors, using a system of six simultaneous equations, found among others that Asian Americans have high achievement levels[3] and high occupational expectations and plans about college. However, they have low efficacy and low perceived teacher's expectations. The authors suggest that low efficacy among Asian Americans may "stem from their low individualized feeling of worthiness, although other

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2 Encarnacion Alzona, A History of Education in the Philippines, 1565-1930 (Manila: University of the Philippines Press, 1932), p. 10, documents the tradition thus: "Formal education was known to the Filipinos. They had schools in which their children were taught reading, writing, reckoning, religion and incantation, and fencing for self-defense. In the Southern part of the Islands (in Panay, for instance) there were schools which taught the Sanskrit which was then the official language of the neighboring island of Borneo; arithmetic, including the decimal system; the art of acquiring personal invulnerability; and the effective use of weapons for self defense." With the coming of the Spanish colonizers however, higher learning for Filipinos was stunted since most of the colleges and universities were reserved exclusively for the Spaniards and their offsprings. See Domingo Abella, "The State of Higher Education in the Philippines Under the Spanish Regime," in Miguel B. Gaffud and Aurelio O. Elevazo, eds., Philippine Education: A Forward Look (Manila: First National Conference on Education, 1965). Low motivational drives for higher education among Filipino-Americans is explained by Juanita Tamayo Lott below in the section "Filipino-American Education as a Consumption vs. Investment Expenditure."

3 Sowell, Race and Economics, p. 229, uses Oriental children as examples of minorities who "score as well as white children on most mental tests, despite the de facto segregation (imposed or voluntary) of 'Chinatowns' and 'Little Tokyos' in various Americans cities, and the corresponding segregation of public schools. He attributes this high achievement levels to the cultural norms among Asian-Americans that "emphasize education or the behaviour patterns required for intellectual development."

studies show they have high group self esteem." (Boardman, et.al, p.35). As one can only hypothesize about the causes of this in turn, it is not far-fetched to note that discrimination may be considered a potential explanatory variable. From the 1960 Population Census, Chi (1972, p. 50) has observed: "The educational level of Filipinos is much higher than the level of Spanish surnames but Filipinos have even lower income than the Spanish surnames. Some discriminatory factors apparently enter into these differentials."

Based on these observations the first section of this paper attempts to analyze the macro relationships among education, income and related socio-economic variables pertaining to young Filipino Americans (the age bracket being defined primarily as 16-24 years, and secondarily, encompassing the 14-15 and the 25-34 years groups.) Within the limits of published statistics,[4] the probable reasons underlying the relatively low enrollment will be examined; multiple regression models will be utilized to explain differences in schooling enrollment patterns among the Filipino, Chinese and Japanese communities in the U.S.

A second section analyzes the same problem from a microperspective with data from a survey conducted in the New York City area during Fall 1977-Winter 1978.

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[4] The use of the 1970 Census data maybe criticized only on short-run terms, e.g., its inability to capture demographic changes due to the influx of recent migrants or the changes in the geographic or socio-economic mobility within the Filipino community. From the long-run perspective however, the knowledge about macro relationships in new migrant groups as posited seems to be a <u>sine qua non</u> for establishing benchmarks to estimate the material progress of the community as a whole.

## PART I: A MACRO PROFILE

### Observations from the 1970 Census

The following discussion will introduce us to variables pertinent to the statistical analysis of the next section. Some questions are raised concerning data on education and income inequality.

A. What is the relative dimension of Filipino school enrollment among the young?

In the 14-17 year bracket, Filipino males and females are behind enrollment percentages of the Chinese and Japanese population (See Table A-1) except for rural non-farm Chinese males. In the 18-24 years cohort, Filipino males and females are even more behind the same Asian-American groups. Further into the 25-34 years age group, the same pattern holds, indicating that the relative underenrollment may not be due to postponement of schooling. This point will be analyzed with other socio-economic variables in a later section of this paper.

B. Are there geographical variations in enrollment rates?

Table A-2 shows that the national enrollment rate of young Filipinos (25.2%) is pulled up by those in the West (28.1%) where some 69.5% (=8.17/11.75) of the 18-24 years reside, and pulled down by those in the South which accounts for only 11.2% (=1.32/11.75) of the same age group but has a 15.0% enrollment rate.

The disproportionate percentage enrollment of Southern males (11.6%) is lowest among the regions; this is further caused by the 5.3% enrollment rate of those living in rural non-farms. These stand out sharply in contrast with the data for women in

the region (21.1% for the whole South, 14.6% for the rural non-farm South).

The most pronounced urban-rural difference in enrollment rates within a region is the Northeast (30.0% and 8.0% respectively for males, 17.9% and 9.3% similarly for females).

From PC(2)-1G,* an interesting observation can be discerned: Among the states where Filipinos are concentrated, Illinois has lower than average enrollment rates for most categories by region and selected age groups, e.g., for the total state urban population in the 25-34 years age bracket, for females in the total state and urban populations in the 18-24 years age bracket and for the urban males in the 14-17 years group. However, this observation may not be used to conclude that Filipinos in Illinois are economically and socially worse off than their other brown brothers across the US because it conceals the fact that the low enrollment is a consequence of their high educational attainment as a group and also their higher individual median incomes. The change in immigration laws account for this because the new wave of Filipinos, mainly professionals whose earnings tend to be the highest in any major occupation group, were attracted to areas outside the West where earlier migrants, lower-paid non-professional workers, located.

The Illinois Filipino median schoolyears completed is 4.3 year greater than the total of US Filipinos (12.2 years) while the percentage that graduated from high school is a good 28.6% higher than the 54.7% Filipino national average. Median income differentials are greatest for women in the younger age brackets, e.g.$1,012 more in the 20-24 years cohort and $1,681 more in the

* 1970 Census of Population Subject Report, Japanese, Chinese, and Filipinos in the United States (Washington, D.C.: Bureau of the Census, 1973).

25-34 years group.

C. Are the differences in enrollment rates attributable to the existing schoolyears endowment of Filipinos?

No. Tables A-3 to A-5 show that the median schoolyears completed by either Filipino males or females in the 14-15, 16-19, and 20-24 years age cohorts are below that of their Japanese and Chinese counterparts. Only Filipino women in the 25-34 years bracket exceed the educational attainment of either ethnic group. If the educational objectives of Filipinos are at par with them, the low school enrollment must somehow be compensated for by a greater educational endowment -- but it is not. Linking this to the earlier observation in (A) above that there seems to be no postponement decisions for enrollment, one is forced to conclude that other variables play crucial roles in explaining the disparity.

D. Are the differences in enrollment rates attributable to the work variable?

Yes. Tables A-3 to A-5 indicate that among the young, the percentage <u>not</u> in the labor force is lowest for Filipinos in the three age groups 16-19, 20-24, and 25-34. In fact, there are proportionately more full-time workers among Filipinos in the 20-24 years bracket, the typical age for working on or finishing a college degree: 51% as against 29% and 42% for Chinese and Japanese respectively for males; and 37% as against 29% and 35% for females similarly classified.

Because of the differences in labor force participation, Filipino men and women aged 20-24 earned more, be this measured in mean or median incomes. However, Filipino males seem to be relatively disadvantaged as the comparative figures in Table I

Table I: Ratios of Income and Work Variables, Filipinos to Chinese and Japanese, 20-24 Years Age Bracket, 1970

| | Filipino/Chinese | | Filipino/Japanese | |
|---|---|---|---|---|
| | Male | Female | Male | Female |
| % Weeks worked full time | 1.74 | 1.29 | 1.20 | 1.05 |
| Mean income | 1.30 | 1.28 | 1.03 | 1.08 |
| Median income | 1.44 | 1.59 | 1.08 | 1.22 |
| % Professional, technical, kindred workers; managers and administrators except farm | 0.64 | 1.55 | 0.80 | 0.78 |
| % Single | 0.77 | 0.71 | 0.84 | 0.78 |
| Median schoolyears completed | 0.91 | 0.94 | 0.91 | 0.93 |

Source of basic data: Appendix A, Tables A-3, A-4, and A-5.

suggest. With a 1.74 ratio for Chinese and 1.20 ratio for Japanese in the percentage of weeks worked full time, the Filipino male income ratios of 1.30 and 1.03 respectively indicate that they have to work more as a group to receive the same earnings.

This may be partly attributed to the nature of employment of most Filipino males in this age group. Compared again to the Chinese and Japanese, a smaller fraction of Filipino males are in the professional, technical and kindred workers and managerial, administrative (except farm) major occupational categories. In contrast, relatively more Filipino females are in these job classifications. Hence, the ratios of mean and median incomes are not smaller than the ratio of percentage of weeks worked full time; they do not have to push any harder in weeks worked to earn the same dollars as their counterparts in the two other ethnic communities. Unfortunately, the enrollment rates and educational attainment of Filipino males fall short of the others.

Note likewise that in the 20-24 years bracket, more Filipino men and women are married compared to the Chinese and Japanese. This is another factor that may severely hinder further pursuit of formal education. An earlier study (Chi, 1972) based on the 1960 Population Census concluded that "the extent to which control variables affect mean income differences between the standard group and each of the racial/ethnic group studied vary, with marital status as the most pronounced for Orientals, education and employment for Blacks, Spanish surnames and first generation ethnic groups and age composition for second generation ethnic groups."

Filipino Education as a Consumption vs. Investment Expenditure

All the above quantitative information lend detailed statistical support to the following observation (Lott, 1974, p.10):

"Unfortunately, the educational attainment of the Philippine-American as a whole, both in absolute and comparative terms, is low with an average educational attainment of 10th grade. Common reasons for termination of education before or after high school include marriage, work and/or military service. Of those who enter college, an estimated 10% graduate...Unlike other minority groups which have inherent conducive controls for education, there has been little support or mechanism for educational advancement in both the individual Philippine-American home and the Philippine-American community as a whole...

"Like other socio-economic groups striving for upward mobility, the Philippine-American is interested in immediate and tangible rewards. 'Why waste 4 years of earning power to get a piece of paper?' is not an untypical response from immigrant generation parents."

It would appear therefore that education is not considered by most Filipino-Americans as a sound investment for their future earning capacity. This private valuation may reflect either their thinking about or the kind of education that they have received in the Philippines -- more oriented towards the consumption-type liberal arts rather than the investment-oriented sciences education needed for economic growth and development of the country, and where private rates of return maybe expected to be relatively lower.

A Filipino economist, Sixto Roxas, offers an economic explanation for the strange mix of courses in Philippine educational institution. Private schools, which serve 95% of college enrollment, are predominantly financed by private stockholders and institutional lenders, "both of which groups must, as a matter of economic necessity and in the nature of their business and the character of their investments, look for at least reasonable returns." (Roxas, 1965) These institutions are forced to

"concentrate on those fields where capital investments and instructional costs per student are relatively low: commerce, business administration, teacher training, law and the liberal arts. Since these areas are the fields where enrollments can be multiplied without much additional investment, tuition and fees can be made relatively lower per student in these areas. In a

country where the diploma is more important than the educational discipline these would also be the most attractive areas for students who desire the status symbol and prestige of a college education since these can be purchased here at the lowest price." (Roxas, 1965, pp. 92-93)

A similar viewpoint is expressed in a World Bank report on education in the Philippines (Cheetham and Hawkins, 1976, p. 292):

"The combination of inadequate budgets and relatively unrestricted admissions results in a low cost per student in most private institutions. The Presidential Commission found that the average cost per student in private colleges and universities was only half that of PAASCU (Philippine Accrediting Association of Schools, Colleges, and Universities) institutions and one-fourth of the University of the Philippines and few elite private colleges. This means that private institutions necessarily concentrate on low-cost fields of study (liberal arts, commerce, business administration, and teacher training) and that quality is unsatisfactory in fields requiring relatively high costs per student (for example, engineering, a field in which many graduates fail the professional examination)."

## Regression Models of Income and Education of Three Asian-American Groups

From the macro profile above, some of the variables that are needed for a more rigorous estimation of the relationship among education, income, and socio-economic variables have been identified. These will now be analyzed more rigorously but data available for this project preclude earnings functions as typically presented in the economics literature from being calculated. This requires observations for individuals rather than summary statistics stratified in various ways as may be found in Bureau of Census 1970 Census of Population publications (hereafter referred to as PC(2)-1G).[5] The following regression models and analyses are therefore limited to group mean or median earnings rather than individual earnings.

There are seven age brackets for both males and females in PC(2)-1G from which can be extracted socio-economic data for three major Asian-American groups, Chinese, Japanese, and Filipinos. The use of these age cohorts appears to be the only possible cross-section method that can generate macro relationships from the published statistics. The regression models have for their dependent variables income (mean or median) or its logarithmic transformation. The independent variables are those on education, a dummy variable for sex, labor force participation variables, and other socio-economic data.

Only the results of one of the multivariate regression models will be discussed here at great length since the rest merely support the major findings of this particular version of the income and education relationship. The selected model's

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[5]The 1970 Census 5% public use sample has a 1% sample tape with over 6000 Filipinos but this was not available for the present research.

independent variables are MEDSCH (median schoolyears completed), SEXDUMMY (dummy variable for sex where males=1 and females=0) AGE and AGESQ (quadratic formulation of the bracket midpoint age variable, consistent with concave earnings-age profiles suggested by the literature), and %WTSWL (percentage that worked twenty-six weeks or less in the given age bracket). The latter controls for full- or part-time job considerations which stepwise regression models single out as most important among other labor force characteristics in explaining income levels.[6] (See Appendix A, Tables A-3 to A5 for these variables. Note that these tables indicated a 10% difference between the sexes in this variable for all three ethnic groups.)

The results for the untransformed and logarithmic versions of the dependent variables are presented in Table II; details of the logarithmic income regressions may be found in the Appendix as Table A-6. The independent variables are untransformed data. The most interesting results from Table II can be identified as follows:

(1) MEDSCH appears to be a highly significant explanatory variable for the log of the incomes of Chinese but not for either Filipinos or Japanese: not only are the coefficients for them small, they are also statistically insignificant. This may help explain the low enrollment of Filipinos in higher education in the U.S. because they may feel that it simply does not pay off to to invest in more years of schooling to increase future earnings. The untransformed income models however show identically insignificant coefficients for all three groups but there is a strong argument for not considering this result at all because of the superior statistical properties of trans-

[6] Stepwise regression models for all three ethnic groups, not reported in details here, rank %NOTINL (percentage not in labor force) and %PTKMA (percentage in professional, technical, kindred workers; managers and administrators except farms) as next in ability to reduce the proportion of variance the most.

Table II: Summary of Results, Multivariate Regression, Models of Income Filipinos, Chinese, and Japanese, 1970

| | Filipinos | | Chinese | | Japanese | |
|---|---|---|---|---|---|---|
| MEDSCH | Coefficient | t-Value | Coefficient | t-Value | Coefficient | t-Value |
| LMEDINC | 0.0279 | 0.48 | 0.0700 | 2.84 | 0.0002 | 0.003 |
| LMEANY | -0.1538 | -0.94 | 0.1202 | 4.14 | 0.0378 | 0.527 |
| MEDINC | 18.72 | 0.08 | -136.13 | -0.65 | -419.43 | -0.809 |
| MEANY | 126.96 | 0.47 | -100.80 | -0.41 | -358.20 | -0.67- |
| AGE | | | | | | |
| LMEDINC | 0.0468 | 1.33 | 0.0263 | 0.92 | 0.0145 | 0.29 |
| LMEANY | 0.0117 | 0.12 | 0.0621 | 1.85 | 0.0197 | 0.38 |
| MEDINC | 247.20 | 1.73 | -126.47 | -0.52 | 265.96 | 0.71 |
| MEANY | 323.08 | 1.99 | 1.65 | 0.01 | 321.02 | 0.84 |
| AGESQ | | | | | | |
| LMEDINC | -0.0005 | -1.56 | -0.0003 | -1.22 | -0.0002 | -0.54 |
| LMEANY | -0.0004 | -0.43 | -0.0005 | -1.61 | -0.0002 | -0.42 |
| MEDINC | -2.80 | -2.04 | 0.33 | 0.14 | -3.5436 | -0.98 |
| MEANY | -3.39 | -2.16 | -0.76 | -0.28 | -3.8888 | -1.05 |
| SEXDUMMY | | | | | | |
| LMEDINC | 0.1154 | 0.74 | 0.1489 | 1.69 | 0.0782 | 0.52 |
| LMEANY | -0.3490 | -0.79 | 0.0987 | 1.32 | 0.1698 | 1.06 |
| MEDINC | 812.46 | 1.29 | 845.79 | 1.34 | 1472.40 | 1.27 |
| MEANY | 1217.28 | 1.69 | 1320.00 | 1.75 | 1946.42 | 1.64 |
| %WTSWL | | | | | | |
| LMEDINC | -0.0230 | -2.99 | -0.0168 | -2.09 | -0.0348 | -3.38 |
| LMEANY | -0.0268 | -1.23 | -0.0317 | -4.66 | -0.0266 | -2.40 |
| MEDINC | -36.31 | 1.16 | -155.80 | -2.70 | -95.84 | -1.20 |
| MEANY | -22.45 | -0.63 | -139.10 | -2.02 | -83.89 | -1.02 |

Notation:

LMEDINC - logarithm of median income
LMEANY - logarithm of mean income
MEDINC - median income
MEANY - mean income

Tabular Student's t-values, 8 degrees of freedom = 0.706 at 0.25 Pr, 1.397 at 0.10 Pr, 1.860 at 0.05 Pr, and 2.896 at 0.01 Pr.

formed income data.[7]

(2) Age appears to be the most important variable for Filipinos in explaining income levels.

(3) The SEXDUMMY coefficients indicate generally lower female incomes due to sex considerations alone even after controlling for age, schooling, and full- or part-time work. (For the interpretation of dummy variables, see Part II.) The results here suggest that the income differential between the sexes is strongest among the Chinese largely due to differences in occupational achievement as Tables A-3 to A-5 show.[8]

(4) The %WTSWL variable appears with expected signs in all models. Again, the Chinese have the most significant coefficients while the Filipinos have the least, implying that the effect of part- or full-time work on incomes of the latter is not as pronounced as for the former.

## The Education-Income Link

The inclusion of education among the socio-economic variables that explain income levels may be questioned in the light of previous studies cited in the Introduction to this paper. Many writers have pointed out that the equalization of educational achievement in order to reduce social inequalities has been made feeble by background factors that strongly relate to school achievement (Persell, 1977) or by the indirectness of the effect of education on income through its influence in occupation (Chi, 1972).

While the earlier explanation has been explored by educators, sociologists, and psychologists, a number of economists

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[7] Joseph B. Kruskal, "Statistical Analysis: Transformation of Data," International Encyclopedia of the Social Sciences, Vol. XV, p. 182.

[8] This result is upheld in regression models where age and %WTSWL are not present but in place for which are %PTKMA, %SINGL (percentage who are single), %PWS (percentage who are private wage and salary workers) and %SAMEH (percentage who lived in the same house in 1965). In the logarithmic income models, the %PTKMA is highly significant for Chinese (or Japanese, respectively), while the SEXDUMMY coefficients become insignificant (less significant, resp.) For Filipinos, the SEXDUMMY becomes in fact the most significant variable with coefficient values greater than either Chinese or Japanese.

have forayed into that research area and combined it with the latter. For example, Behrman and Taubman (1976) adopt a model where occupational and earning mobility are related to education via genetic and (home) environmental characteristics. Brown and Reynolds (1975) argue that the negative correlation across occupations of mean IQ and IQ variations may offer a competing explanation to various discrimination models propounded to explain the occupational patterns of Chinese-Americans, Jews, Blacks, etc. They qualify their statements though by concluding that "Labor market positions of various groups cannot be entirely explained by IQ distributions." (Brown and Reynolds, 1975, p. 1006.)

Similarly, Corcoran, Jencks and Olneck conclude from their study (1976) that parental characteristics exert considerable influence on the test scores and educational attainment of their children which in turn affect their earnings. They also suggest that in view of the fact that unmeasured parental characteristics affect earnings of their children independent of test scores and educational attainment, it may indeed be the case that parents do influence their children's preference for cash vs. psychic income.

These observations maybe interpreted appropriately for the problems of native-born Americans of Filipino ancestry who maybe expected to have attitudes towards education based on parental background. For example, a study by Junasa of Filipino youth in Waipahu, Hawaii, concludes that a greater fraction of those planning to continue their schooling after graduation from high school are from families of higher socio-economic background. This same conclusion is reached for the larger American society by Bowles and Gintis in their book (1976).

More important to the present issue, Junasa finds that those youngsters who planned to further their studies have

parents who "expressed deep interest in the children's schooling by (a) keeping themselves informed of the progress of their children in school, (b) frequently encouraging their children to do better, and (c) expressing definite wishes to their children that they seek further schooling." (Junasa, 1961.)

To the extent that the parent's socio-economic status and their desire to have more educated children are predetermined by their own Philippine experience, the educational system in the Philippines maybe considered an integral part of the economic problem of both old and new generation of immigrants. Less educated parents who have not broken the barriers to upward socio-economic mobility in the US may not prod their siblings to pursue higher education. Even the more educated among these parents may fail to motivate their children because of the problems they themselves have faced as immigrant professionals, e.g., discriminatory practices in the labor markets, licensing requirements, failure to get jobs due to alleged overqualifications in experience and/or education, or poor quality education, and even working in areas which their educational backgrounds do not fit.[9]

Quite surprisingly, Junasa also finds that the plans and aspirations of the Filipino youth in Waipahu are not correlated to formal peer group associations in school. Another result -- that Protestant youth tend to plan for further schooling in greater proportion than Roman Catholics -- maybe questioned on the ground that the crucial variable may be socio-economic status, i.e., Protestants may belong to higher socio-economic classes, a debate with roots in economic history. In general, Junasa's

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[9]This last reason is also true of many American college graduates. The prediction of the occupational outlook for college graduates by the US Bureau of Labor Statistics for college graduates up to 1985 is that only about one out of four undergraduate degrees will be tapped by the job market, with the rest of the graduates either entering other fields for which they were educated or becoming unemployed. Cited in Time, August 14, 1978, p. 76. A study of Filipino immigrant problems in Hawaii reveal problems of underemployment for professionals and those associated with a change of occupation. Kenneth David and William King, "Review and Analysis of Problems of Recent Immigrants in Hawaii," Honolulu City and County Office of Human Resources, Hawaii (February 15, 1974).

## PART II: A MICRO PROFILE

The macro analysis in the previous section was based on the Population Census of 1970 at which time the Filipino-American community was just starting to experience another change in age composition and occupational distribution as brought about by landmark revisions in U.S. immigration laws. Pertinent to the present research problem is the fact that about one out of four recent migrants are aged 19 years or under -- the very age bracket that will soon be fully exposed to the labor market and the socio-economic realities of American life.

For example, in 1968, of the 16,731 immigrants from the Philippines, a good 27.4% were in the 19 years and below age bracket but this increased even more in the following years. Considering that the number of Filipino migrants have increased both absolutely and proportionately (rising from a mere 3.68% in 1968 to 9.35% of all immigrants to the U.S. in 1976), the increasing numbers of young Filipinos may be expected to bring with them problems concerning education of an entirely different nature as previous waves of migrants. (Macaranas, 1978.)

A survey of the educational attitudes and work/income opportunities perception of young Filipino-Americans was conducted in attempts to identify potential and actual barriers to higher education. A pre-tested survey instrument (see Appendix B) was distributed to various community organizations and individuals in New York City in late Fall 1977 and early Winter 1978. This non-random method isolates certain characteristics of a sub-group within the Filipino-American community and may not be representative of the entire population, but it is definitely an important step in identifying areas of future concern for both public policy makers and private community leaders.

## The Sample

A total of 55 responses were received but 13 were discarded in later analysis due to incomplete answers to key questions. In this reduced sample, the mean age is 26.2 years. These respondents are predominantly Philippine-born (95%), single (85%), reared in an urban place (71%), with a job (76%) rather than in school (39%), and may thus be the typical new-wave migrant of the past two decades (Macaranas, 1977). There are three more males than females. Of those in school, only 27% are full-time students. Of those with a job, 63% work for at least 35 hours each week.

In extrapolating the results of this survey to the total Filipino community in general, the above sub-sample restrictions must be noted. The inter-generational differences among the Filipino Americans in terms of educational attitudes and work/income opportunities perception maybe expected to be highly significant (Arias, 1978; Owan, 1975; Farmer, 1969).

## Attitudinal Variables

Fourteen indices were constructed from the questionnaire responses to represent variables pertinent to education, work and income opportunities perception. Summary statistics from 51 respondents are presented in Table C-1. Each of the variables are described below.

(1) EDMOTIV: index of motivation to seek further education based on educational level desired, potential earnings and potential promotion in present work.

(2) PPRESS: index of peer pressure for education based on educational attainment of friends and opinions of family members.

(3) FINL: index of financial ease based on perceived net benefits of further education and other sources of support (reratives, private institutions, government).

(4) NON-INC: index of non-income reasons for further education based on improvement in social life and non-availability of training programs in the field of work of the respondent.

(5) DISCEXP: index of the feeling of being discriminated against in jobs based on ethnic origin, sex, and pay differentials.

(6) OVERDISC: index of opinion about overcoming discrimination based on higher education and motivations for work promotion.

(7) JOBSAT: index of work satisfaction based on personal assessment and perceived rating by superiors.

(8) DESHIY: index of the desire for higher income based on preferred income at present age, and expected income at this point of stay in the U.S.

(9) OTHERY: index of entrepreneurial interest based on the desire of being one's own boss.

(10) PATRON: index of job availability or promotion based on relatives or other personal contacts.

(11) GEOGMOB: index of geographic mobility for job-related reasons.

(12) NEWFIELD: index of desire to change fields of education or careers based on educational preparation in the Philippines or the US, opinion on the need for US diploma, income potential, peer experience.

(13) JOBEXP: index of opinion on solid work experience in the Philippines or the US as substitute for a US-earned degree.

(14) EFFIC: index of efficacy, i.e., belief in one's ability to change things like working in a new field, self-study for work promotion, desire for more work responsibilities, health condition, entrepreneurial drive, ability to complain if underpaid.

These indices are derived from responses to at least two equally-weighted questions or statements. There are six possible responses for each question most of which are scaled as follows:[11] Strongly Agree = 5, Agree = 4, Uncertain = 3, Disagree = 2, Strongly Disagree = 1, Not Applicable = 0. Hence, indices with

[11] The exceptions are question numbers 1, 9, 15, 30, 32, 41, and 42. A sample questionnaire may be found in Appendix B.

mean values near four suggest agreement with the variables as defined above, e.g., EDMOTIV mean of 3.84 implies slight agreement while PPRESS mean of 4.21 implies a little more agreement with respect to the attitudes/opinions thus expressed in the various statements weighted for these two indices.

## Demographic Variables

It is instructive to ascertain what demographic variables exert differential influence on these attitudinal indices. For example, does civil status or having a job really matter in the EDMOT as Lott suggests above?

The dummy variables technique in regression analysis maybe used for this purpose. Due to limited survey forms which were completed, a trimmed-down sample of 42 respondents and seven demographic variables are analyzed below. The linear regression model used is

$$\text{(Eq.1)} \qquad Y_j = \alpha_j + \sum_{i=1}^{7} \beta_i X_i$$

where $Y_j$ = attitudinal variable j, e.g., EDMOT, PPRESS, ...., EFFIC

$X_i$ = demographic variable i, i = 1, ...., 7

$X_1$ = AGE or age of respondent in years

$X_2$ = SEX = 1 if male
= 0 if female

$X_3$ = BIRTHPLA or place of birth = 1 if born in the Philippines
= 0 if not born in the Philippines

$X_4$ = RUR-URB = 1 if reared in an urban area
= 0 if reared in a rural area

$X_5$ = CSTAT = 1 if married
= 0 if single

$X_6$ = INSCHL = 1 if still in school
= 0 if not in school
$X_7$ = WJOB = 1 with a job
= 0 without job

Based on 14 separate multiple regression models for all the attitudinal variables, two tables have been prepared to show three demographic parameters with the most statistically significant coefficients and those with the highest coefficient values respectively. Only the first table (Table III) has complete entries because the next table repeats information from this earlier one and emphasis is placed on variables not found in the preceding.

By far the most frequent variable to appear in either Tables is the intercept term $\alpha_j$ which has a special interpretation in dummy variable analysis. (Johnston, 1972, pp. 176-185.) Based on the X-variable definitions, the $\alpha_1$ simply is the intercept of the expected $Y_1$ observation for a female born in US, reared in a rural area, and who is neither in school or with a job. This serves as a useful norm for the other demographic characteristics, e.g., $\alpha_1 + \beta_2$ is the intercept of the expected $Y_j$ observation for a male with similar characteristics. By itself, the t-value for a coefficient of a dummy regressor tests the significance of the difference between coefficients of the demographic variables, e.g., between male and female respondents, between those reared in an urban area and rural area, etc. Hence, Tables III and IV appropriately gives the differential influence of demographic characteristics on attitudinal variables where dummy regressors were used. Here are some observations from these Tables:

(1) Age and civil status have the most significant influence on EDMOT. Note that these were not entered as dummy variables and hence the coefficients stand for changes in EDMOT brought about by changes in the variable values.

(2) From Table III (or Table IV respectively), BIRTHPLA appears in 7 (or 8) cases. With 5 observations each in Table III, SEX has 4, CSTAT has 6 and WJOB has 4 in Table IV. INSCHL and RUR-URB have 2 each (1 and 4,

Table III: Three Most Statistically Significant Demographic Variables Explaining Educational Attitudes and Work/Income Opportunities Perception

| Independent Variable | First | | Second | | Third | |
|---|---|---|---|---|---|---|
| | Coefficient | t-Value | Coefficient | t-Value | Coefficient | t-Value |
| 1. EDMOT | INTERCEPT 4.82 | 3.76 | AGE -0.05 | -1.68 | CSTAT 0.46 | 1.12 |
| 2. PPRESS | RUR-URB -3.35 | -1.87 | SEX -1.95 | -1.12 | WJOB 1.50 | 0.70 |
| 3. FINL | INTERCEPT 3.04 | 2.34 | SEX -0.52 | -1.65 | BIRTHPLA 0.62 | 0.97 |
| 4. NON-INC | SEX -1.27 | -0.67 | RUR-URB 1.20 | 0.61 | BIRTHPLA 2.09 | 0.54 |
| 5. DISCEXP | INTERCEPT 2.91 | 2.21 | BIRTHPLA -1.08 | -1.66 | AGE 0.04 | 1.37 |
| 6. OVERDISC | INTERCEPT 3.51 | 3.02 | BIRTHPLA 0.91 | 1.57 | AGE -0.03 | 1.33 |
| 7. JOBSAT | WJOB 1.50 | 2.62 | INTERCEPT 4.33 | 2.27 | INSCHL -1.18 | -2.22 |
| 8. DESHIY | BIRTHPLA 1.90 | 1.83 | WJOB 1.05 | 1.67 | SEX -0.44 | -0.86 |
| 9. OTHERY | SEX 0.61 | 1.49 | CSTAT 0.44 | 0.81 | WJOB 0.41 | 0.81 |
| 10. PATRON | INTERCEPT 4.56 | 3.43 | BIRTHPLA -1.35 | -2.06 | WJOB -0.65 | -1.63 |
| 11. GEOGMOB | INTERCEPT 4.83 | 2.52 | CSTAT -1.14 | -1.84 | INSCHL -0.69 | -1.29 |
| 12. NEWFIELD | INTERCEPT 3.67 | 3.72 | CSTAT 0.48 | 1.49 | BIRTHPLA -0.67 | -1.36 |
| 13. JOBEXP | INTERCEPT 3.79 | 3.79 | AGE -0.04 | -2.02 | CSTAT -0.52 | -1.58 |
| 14. EFFIC | INTERCEPT 2.70 | 3.48 | BIRTHPLA 0.67 | 1.74 | SEX 0.29 | 1.55 |

*Based on multiple regression of 7 independent variables (AGE, SEX, BIRTHPLA, RUR-URB, CSTAT, INSCHL, and WJOB), from 42 completed survey questionnaires. Tabular t-values for various significance levels for 40 observations ar 1.684 at 5%, 1.303 at 10%, and 0.851 at 20%.

Table IV: Three Highest Demographic Variable Coefficients Explaining Educational Attitudes and Work/Income Opportunities Perception*

| Independent Variable | First | | Second | | Third | |
|---|---|---|---|---|---|---|
| | Coefficient | t-Value | Coefficient | t-Value | Coefficient | t-Value |
| 1. EDMOT | INTERCEPT | | BIRTHPLA | -0.47 -0.75 | CSTAT | |
| 2. PPRESS | RUR-URB | | SEX | | INTERCEPT | 1.92 0.27 |
| 3. FINL | INTERCEPT | | BIRTHPLA | | SEX | |
| 4. NON-INC | BIRTHPLA | | SEX | | RUR-URB | |
| 5. DISCEXP | INTERCEPT | | BIRTHPLA | | CSTAT | 0.38 0.89 |
| 6. OVERDISC | INTERCEPT | | BIRTHPLA | | RUR-URB | -0.31 -1.06 |
| 7. JOBSAT | INTERCEPT | | WJOB | | INSCHL | |
| 8. DESHIY | INTERCEPT | 1.22 0.58 | WJOB | | RUR-URB | -0.45 -0.86 |
| 9. OTHERY | INTERCEPT | 0.98 0.58 | SEX | | CSTAT | |
| 10. PATRON | INTERCEPT | | BIRTHPLA | | WJOB | |
| 11. GEOGMOB | INTERCEPT | | CSTAT | | WJOB | -.073 -1.26 |
| 12. NEWFIELD | INTERCEPT | | BIRTHPLA | | CSTAT | |
| 13. JOBEXP | INTERCEPT | | CSTAT | | BIRTHPLA | -0.27 -0.55 |
| 14. EFFIC | INTERCEPT | | BIRTHPLA | | INSCHL | -0.31 -1.43 |

*Based on the same regressions as the previous table where the values for the above variables, where not written down, may also be found.

respectively).

(3) Birthplace is most significantly related in a positive way to FINL, NON-INC, OVERDISC, and DESHIY, but negatively to DISCEXP, PATRON, and NEWFIELD. Caution on the interpretation of these results must be observed since there are only three non-Philippine born respondents of the 42 in the sample considered here.

(4) SEX affects OTHERY positively, suggesting that males are more entrepreneurial, but works negatively for FINL, PPRESS, DESHIY, and NON-INC, implying that females face financial constraints when it comes to education more than males do. Likewise, females face smaller pressure for education, have relatively lower index of desire for higher income, and will go to school more for the improvement of their social life or due to unavailable training programs in their fields of work.

(5) CSTAT has positive coefficients not only for EDMOT but also for NEWFIELD, and OTHERY. However, it has negative coefficients for GEOGMOB and JOBEXP, i.e., singles are less geographically mobile and have lower index of the opinion on solid work experience in the Philippines or the U.S. as substitute for a U.S.-earned degree -- indicating a strong belief in the efficacy of higher education.

(6) AGE has positive effect on DISCEXP but negative on EDMOT, OVERDISC, and JOBEXP. This means that older people have greater feeling of the existence of discrimination but are less motivated to further their education; in fact, they feel that a U.S.-earned degree really cannot substitute for solid work experience in the Philippines or the U.S. AGE did not appear among the three largest coefficients because data used is in years as against the dummy 1 or 0 values.

(7) WJOB has positive coefficients on JOBSAT, DESHIY, OTHERY, and PPRESS and negative for PATRON. These suggest that those with jobs appear contented with their work but because of their greater entrepreneurial interest, desire higher incomes. PATRON or personal contacts for job promotion or availability does not appear to loom as an important consideration for those with jobs.

(8) RUR-URB affects PPRESS negatively indicating weakened pressure of family and peer opinions on higher education among those reared in urban areas. Those reared in rural areas care less about NON- INC or non-income reasons for further education, or alternatively have higher DESHIY or desire for higher incomes; they also tend to believe more than urban-raised respondents do in overcoming discrimination through higher education and job promotions (OVERDISC).

(9) INSCHL affects GEOGMOB and JOBSAT negatively as expected.

(10) Table IV merely strengthens the relationships in #3 to #9 above by ranking the coefficient values rather than the statistical significance of these coefficients. Only in DESHIY and OTHERY are there changes in the most important variable.

## Factors Motivating Education

The sample mean value for EDMOTIV of 3.84 together with a standard deviation of 0.76 implies a more positive rather a negative predisposition towards higher education. The remaining indices maybe thought of as independent variables that explain such motivation. The questions from which these indices are constructed suggest slight, if any, causality in the reverse direction, i.e., EDMOTIV explaining JOBSAT or EFFIC. Hence, it is appropriate to perform single equation regressions on the indices where EDMOTIV is the dependent variable rather than structure a simultaneous equation system where there are reverse effects and causalities.

Before looking at the results of these regressions, casual inspection of the product-moment correlation coefficient matrix may hint at the most important variables influencing or influenced by EDMOTIV. Among those with positive coefficients, DISCEXP and OTHERY have the highest correlation with EDMOTIV; other indices with positive coefficients are NON-INC, NEWFIELD, and PPRESS. Among those with negative coefficients JOBEXP, JOBSAT, FINL, and DESHIY have the highest correlation with EDMOTIV; lower coefficients hold for EFFIC, GEOGMOB, OVERDISC, and PATRON. (See Table V.)

### 1. Regression Analysis

Since there are no a priori expectations regarding the importance of variables that motivate higher education, stepwise regression is used to rank the factors that influence EDMOTIV. From this, the first seven indices that reduced the proportion of variance the most are adopted as explanatory variables in

Table V: Matrix of Product-Moment Correlation Coefficients of Indices Pertaining to Educational Attitudes and Work/Income Opportunities Perception

| | EDMOTI | PPRESS | FINL | NON-IN | DISCEX | OVERDI | JOBSAT | DESHIY | OTHERY | PATRON | GEOGMO | NEWFIE | JOBEXP | EFFIC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDMOTIV | 1.0000 | 0.0438 | -0.2073 | 0.1098 | 0.3091 | -0.0790 | -0.2408 | -0.1993 | 0.2234 | -0.0661 | -0.0816 | 0.0915 | -0.2707 | -0.0904 |
| PPRESS | 0.0438 | 1.0000 | 0.1795 | -0.1627 | -0.0950 | -0.0014 | -0.1473 | -0.3906 | 0.0741 | 0.2035 | -0.0794 | 0.1496 | 0.0384 | -0.1295 |
| FINL | -0.2073 | 0.1795 | 1.0000 | 0.1423 | -0.0945 | 0.2427 | -0.0755 | -0.1418 | 0.0142 | 0.1154 | 0.2402 | 0.1783 | 0.2155 | -0.0512 |
| NON-INC | 0.1098 | -0.1627 | 0.1423 | 1.0000 | -0.0466 | 0.1177 | -0.4424 | -0.1955 | -0.0348 | 0.1698 | -0.0504 | 0.2555 | -0.1700 | -0.2257 |
| DISCEXP | 0.3091 | -0.0950 | -0.0946 | -0.0466 | 1.0000 | -0.1970 | -0.2587 | -0.1267 | 0.1154 | 0.0714 | -0.0644 | 0.2165 | -0.1459 | 0.1392 |
| OVERDISC | -0.0790 | -0.0014 | 0.2427 | 0.1177 | -0.1970 | 1.0000 | -0.0686 | 0.1113 | 0.0778 | 0.1026 | -0.0046 | 0.0437 | 0.1267 | 0.1195 |
| JOBSAT | -0.2408 | -0.1473 | -0.0755 | -0.4424 | -0.2587 | -0.0686 | 1.0000 | 0.4906 | -0.0278 | -0.1260 | 0.2775 | -0.1295 | 0.1832 | 0.3855 |
| DESHIY | -0.1993 | -0.3906 | -0.1418 | -0.1955 | -0.1267 | 0.1113 | 0.4906 | 1.0000 | 0.0340 | -0.2959 | 0.2338 | -0.3156 | 0.2267 | 0.2106 |
| OTHERY | 0.2234 | 0.0741 | 0.0142 | -0.0348 | 0.1154 | 0.0778 | -0.0278 | 0.0340 | 1.0000 | -0.0309 | 0.1795 | -0.1591 | -0.0979 | 0.3508 |
| PATRON | -0.0661 | 0.2035 | 0.1154 | 0.1698 | 0.0714 | 0.1026 | -0.1260 | -0.2959 | -0.0309 | 1.0000 | -0.0762 | 0.3763 | -0.0832 | 0.0633 |
| GEOGMOB | -0.0816 | -0.0794 | 0.2402 | -0.0504 | -0.0644 | -0.0046 | 0.2775 | 0.2338 | 0.1795 | -0.0762 | 1.0000 | -0.2501 | 0.2116 | 0.1365 |
| NEWFIELD | 0.0915 | 0.1496 | 0.1783 | 0.2555 | 0.2165 | 0.0437 | -0.1295 | -0.3156 | -0.1591 | 0.3763 | -0.2501 | 1.0000 | -0.2173 | 0.0410 |
| JOBEXP | -0.2707 | 0.0384 | 0.2155 | -0.1700 | -0.1459 | 0.1267 | 0.1832 | 0.2267 | -0.0979 | -0.0832 | 0.2116 | -0.2173 | 1.0000 | -0.0211 |
| EFFIC | -0.0904 | -0.1295 | -0.0512 | -0.2257 | 0.1392 | 0.1195 | 0.3855 | 0.2106 | 0.3508 | 0.0633 | 0.1365 | 0.0410 | -0.0211 | 1.0000 |

several multiple regressions. (The sequence of independent variables entered are altered based on the regression coefficient. values or based on computed values of Student's t.)

The results are very striking. The stepwise regression selected the following indices as the most important explanatory variables for EDMOTIV, DISCEXP, JOBEXP, OTHERY, EFFIC, FINL, DESHIY, and PATRON. Other than the intercept, the regression coefficients and t-values for EFFIC, DISCEXP, FINL, and OTHERY are the highest; the results are upheld in many multivariate regressions one of which is shown in Table VI together with the stepwise regression results.

Table VI: Regression Results - Factors Motivating Education

| | Multivariate | | Stepwise | |
|---|---|---|---|---|
| | Coefficient | t-value | Coefficient | t-value |
| DISCEXP | 0.26 | 1.59 | 0.25 | 1.89 |
| JOBEXP | -0.15 | -0.86 | -0.16 | -1.07 |
| OTHERY | 0.19 | 1.46 | 0.20 | 0.72 |
| EFFIC | -0.27 | -1.04 | -0.28 | -1.29 |
| FINL | -0.23 | -1.42 | -0.17 | -1.25 |
| DESHIY | -0.07 | -0.64 | -0.08 | -0.95 |
| PATRON | -0.13 | -0.85 | -0.08 | -0.62 |

Notation: See text.

The negative EFFIC regression coefficients imply that those who believe in their ability to change things around them (pertinent to work and income opportunities) tend to be less motivated to pursue higher education. A one-point increase in the EFFIC index causes EDMOTIV to decline by more than a quarter of a point. However, the prob-value or the Pr (EFFIC would be as large as the value actually observed if $H_o$ were true, $H_o$: EFFIC does not decrease EDMOTIV) is between 0.25 and 0.10; this maybe too high a probability for the null hypothesis to be accepted.[12]

On the other hand, the positive DISCEXP regression coefficient I dicates that those who feel that discrimination exixts in various forms have positive outlook concerning higher education. Note that a one-point increase in the DISCEXP coefficient pulls up the EDMOTIV index by about a quarter of a point also. Here the prob-value is between .05 and .025 and the $H_o$ may be comfortably rejected. Hence, it may be concluded that DISCEXP does affect EDMOTIV in this sample of young Filipino Americans

The FINL index regression coefficient, like EFFIC, is negative and has a low prob-value in the multivariate model. However, the prob-value in the stepwise regression is much improved between .10 and .05 significance level. It cannot be concluded therefore that the perceived sources of financial support for further education and the net benefit derived therefrom affect EDMOTIV for the given sample.

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[12] This is an alternative method to the classical tests of hypothesis that is increasingly used by applied statisticians. The rule for prob-value is to reject $H_o$ if and only if prob-value $\leq \alpha$. Thomas H. Wonnacott and Ronald J. Wonnacott, Introductory Statistics for Business and Economics, 2nd Edition (New York: John Wiley and Sons, 1977), p. 254.

OTHERY, the index of entrepreneurial interest, has a more significant positive regression coefficient than FINL or EFFIC and may really be considered as next in importance to DISCEXP. A one-point increase in OTHERY causes an increase of a fifth point in EDMOTIV with prob-value between .10 and .05.

The remaining variables in the 7-independent variables model (JOBEXP, DESHIY, and PATRON) are not too significant in prob-values or in terms of coefficient sizes as must the rest of the excluded variables which were ranked later than these.

## 2. Demand Analysis

In the context of demand analysis, the attitudinal indices maybe considered as parameters of the tastes and preferences variable. However, a full blown econometric estimation of the higher education demand function also requires data on price of education relative to prices of company training, self-study, etc., and income of the individual respondent. (See Table VII.) These are difficult to piece together from the fragmentary nature of most completed questionnaires. Nevertheless, the implications of the major explanatory variables on the demand for higher education by young Filipino-Americans maybe qualitatively evaluated from Figure I below.

Figure I: Demand and Supply Analysis, Higher Education

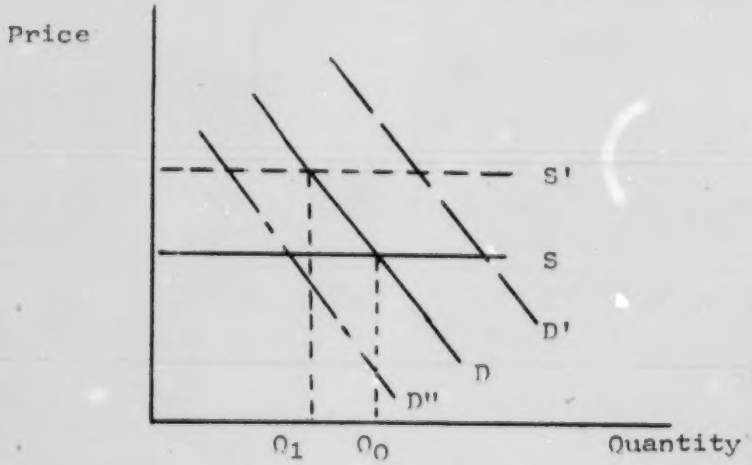

Table VII: Factors Affecting the Demand for Higher Education

The effective demand for higher education is a function of

a. price of formal education relative to prices of company training, self-study (non-formal), etc.
   i. varies from State to State according to higher education aid, competitiveness of entry
   ii. varies by industry, firm, level of responsibility
b. income of the individual available for education
   i. number of hours worked per week; average weekly take-home pay; number of dependents
   ii. age, length of work experience
   iii. type of visa
   iv. industry; geographic location
c. tastes and preferences (surrogate for need for education)
   i. motivation for promotion
      a. target income (family size, number of dependents)
      b. education-job fit
      c. non-pecuniary rewrds (prestige, being one's own boss)
      d. feeling of discrimination
      e. age
      f. length of stay in the US; openness to American culture
      g. length of stay in rural area (early socialization)
   ii. consumption aspect of higher education vs. investment aspect
   iii. change field of specialization
   iv. time allocation: preference for leisure activities in hours per week
   v. peer pressure

ac Here, the supply curve is given as a perfectly price-elastic function, i.e., the higher education services available to them have essentially fixed prices. This long-run supply curve implies that factors other than price may be more crucial determinants of the supply available to them, e.g., admission standards, quota systems, etc. with more rigid standards and stringent quota based on a number of disadvantage criteria reflected in an upward shift to S', thus curtailing enrollment from $Q_o$ to $Q_1$.[13]

The demand curve shift parameters based on tastes and preferences include positive factors like DISCEXP, OTHERY, and negative factors like JOBEXP, EFFIC, FINL, DESHIY, and PATRON. Positive (negative, respectively) factors are those that shift D to the right (left) or from D to D' (D to D").

The term "positive" is not used in the normative sense and hence the feeling of the existence of discrimination does not suggest a "good" standard from the point of view of higher education, i.e., this means only that larger DISCEXP indices will motivate young Filipino-Americans to seek more years of advanced studies, without asserting that there maybe higher implicit costs, e.g., psychic costs associated with feelings of discrimination.[14]

This DISCEXP example should not be confused with the shift of S to S' which by itself may call forth a response in D to D' (independent of the DISCEXP determinants) to offset the reduction in the supply of education services brought about by higher

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[13]The perfectly elastic S may arise purely from the time dimension. In the long run, producers of educational services can adjust to changes in demand more favorably in output response compared to the short-run where the S curve is positively sloped -- hence resulting in both price and quantity responses.

[14]Cf. the observation of Boardman, et.al. above, p. 4.

admission standards or more stringent quota systems.

Quota systems need not imply strict proportional representation based on race alone; indeed this has been ruled by the U.S. Supreme Court in the Bakke decision as contrary to the spirit of the law. Other indicators of disadvantage maybe worked into admissions formula, e.g., income levels at present and in the past, family size or number of dependents, etc., but this leaves room for administrators to consider non-disadvantage criteria as well, e.g., preference to sons and daughters of alumni, personality test scores, etc. Because of cultural biases in examinations, difficulties in adjusting to American society, etc., the latter non-disadvantage factors may in fact place at a disadvantage young Filipino-Americans who are recent migrants and Philippine-educated.

Schuh and Quesada (1967) report that students in the Philippines and the U.S. see their educational environments as noticeably different, based on semantic differential ratings on concepts about "myself, the way I would most want to be, my role as a student, my faculty advisor." However, senior students in the Philippines and in the U.S. were found to have extremely similar evaluations of themselves. Schuh , Trexler, and Quesada (1969) also report that Filipino and American college students have divergent preferences for desirable working conditions; they found a greater frequency of sex differences in preferences for certain job conditions for the American cultural group.

Focusing on another demand shift parameter based on taste, it may be noted that OTHERY also has a positive relation to EDMOTIV and hence to the demand curve. This implies that more independent-minded persons who are entrepreneurially-inclined will also opt for greater education. What this may show is a belief in the cogency of education to business success, leading one to conclude that among these entrepreneurially-minded persons, an investment in a US education is evidently considered as worthwhile. One would not expect such a reaction if their Philippine education were not of the consumption type.

The EFFIC index relates to OTHERY in a way but it is a more comprehensive measure of the individual's belief in his/her ability to effect changes. Surprisingly, EFFIC has a negative coefficient in the regression model where those of OTHERY are positive. EFFIC coefficients are absolutely larger than OTHERY but are less statistically significant. A mathematical explanation for the difference in signs is the relation of non-entrepreneurial measures of EFFIC to EDMOTIV.

## Summary and Conclusions

When it concerns education, Filipinos are not considered by many policy proponents, e.g., the Carnegie Commission on Higher Education, as a disadvantaged group (Yoshioka, et.al., 1973.) However, the 1970 Census of Population reveals a surprisingly different enrollment pattern for young Filipino-Americans which may turn out to be a major problem for one of the fastest growing minority groups in the country today. While the statistics gathered from this Census show only the quantitative dimensions of the problem, some people have observed that there is a qualitative aspect of education of Filipino-Americans that remains to be explored. (Interviews with Paula Bagasao and Artemio Lejarde, Jr.) This definitely alters the income prospects of the community in general.

Regression models of the three major Asian American groups suggest that education is not a significant explanatory variable for income levels of Filipinos unlike that of the Chinese and less so of the Japanese, even after controlling for variables that impact on earnings pronouncedly, e.g., age, sex, and percentage of full-time workers. This may be due to the observation -- which holds more strongly for newer immigrant groups perhaps -- that education does not link with incomes directly; many studies have shown that occupational distribution is a major if not the factor explaining income levels. A priori, it is to be expected that years of schooling should correlate with occupational achievement and thus result to higher income levels for the

Filipino community; however, the average Filipino income in the US in 1970 was way below that of the average American, thus leading to the above result of the non-significance of positive education coefficients in income regression models.

This can be explained as a result of the consumption nature of the education received by most Filipinos in the Philippines, no doubt induced by business-oriented suppliers of educational services and strengthened by a culturally-sanctioned demand for formal education not necessarily in line with the development needs of the country. This contrasts sharply with the investment-type education desired by a typically discrimination-conscious and entrepreneurial-minded group of young respondents in the survey conducted for this research. (The exceptions to this are young females who have statistically significant non-income reasons for pursuing higher education, e.g., improved social life.)

These two types of education have a bearing on occupational achievement and hence earnings levels. For example, in the 20-24 years age cohort, Filipino males have to work more hours to achieve parity with the Chinese and Japanese because relatively fewer of Filipinos are in the occupational category of professional, technical, and kindred workers and managerial and administrative (except farms) workers. When compared at absolute levels however, these Filipinos have higher incomes relative to the two other Asian American groups despite their consistently lower enrollment rates and educational attainment.

The consumption view of education that may have been carried over to the US by many Filipino migrants and transmitted to offsprings is potentially damaging to those who have less intense feelings about the existence of discrimination, or any experience thereof (lower DISCEXP), and those who are less entrepreneurial in character (lower OTHERY), because the motivation to further education (EDMOT) is restricted by these attitudinal factors. Likewise, the regression models show that EDMOT is significantly

lower for older and married Filipinos and for those who believe in their own abilities to improve their work and income opportunities without pursuing higher formal education. While the perceived financial constraint is not statistically significant for the whole sample, it does appear to be a problem for females who in the earlier macro section are reported to be jeopardized by sex considerations alone even after controlling for the percentage employed in professional and similar high-level occupational groups.

Desire for higher incomes (DESHIY) is registered more markedly for those reared in rural areas and it is this group that also believes in overcoming discrimination through higher education and job promotions. To the extent that recent Filipino migrants may come predominantly from urban areas in the Philippines, then the shift to investment-type of education may not materialize without proper community support, e.g., improved information on the job needs of the particular place where an individual wishes to reside so that he/she can tailor an educational program around it, counseling programs to direct high school students to quality schools for specific fields, etc.

However, correcting the Filipino migrant's consumption bias in education should not be considered a panacea for race inequity in income and employment because it will not change employers' perception of their performance abilities (Dick and Medoff, 1976) nor will it lead to an automatic improvement under the market processes (Gwinton, 1975). There still is the need to make discrimination a costly proposition for employers through affirmative action programs and corresponding penalties for non-compliance. There is a strong presumption that the social benefits thus generated maybe worth the trouble of initiating and enforcing such programs.

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APPENDIX A: SUPPORTING TABLES FOR

PART I: A MACRO PROFILE

TABLE A-1: COMPARATIVE PERCENTAGE ENROLLMENT, FILIPINOS, CHINESE, and JAPANESE, BY REGION and SELECTED AGE BRACKETS, 1970

| | TOTAL | URBAN | RURAL NON-FARM | RURAL FARM |
|---|---|---|---|---|
| FILIPINOS | | | | |
| 25-34 years | 6.9 | 7.1 | 4.6 | 1.7 |
| 18-24 years | | | | |
| Male | 27.5 | 28.6 | 21.1 | 17.8 |
| Female | 23.2 | 23.5 | 19.6 | 42.0 |
| 14-17 years | | | | |
| Male | 92.9 | 92.9 | 92.8 | 90.1 |
| Female | 92.6 | 92.3 | 93.2 | 100.0 |
| CHINESE | | | | |
| 25-34 years | 18.3 | 18.5 | 11.1 | . . . |
| 18-24 years | | | | |
| Male | 70.8 | 71.1 | 62.0 | . . . |
| Female | 58.2 | 58.5 | 48.1 | . . . |
| 14-17 years | | | | |
| Male | 95.3 | 95.5 | 88.7 | . . . |
| Female | 95.2 | 95.3 | 94.1 | . . . |
| JAPANESE | | | | |
| 25-34 years | 9.8 | 10.1 | 6.5 | 5.2 |
| 18-24 years | | | | |
| Male | 55.6 | 56.6 | 40.7 | 61.1 |
| Female | 48.4 | 49.0 | 33.8 | 63.1 |
| 14-17 years | | | | |
| Male | 96.3 | 96.7 | 93.4 | 95.3 |
| Female | 96.2 | 96.3 | 95.2 | 98.1 |

Source of Data: U.S. Department of Commerce, 1970 Census of Population, Subject Report, PC(2)-1G

TABLE A-2: ENROLLMENT RATES, OTHER EDUCATION DATA, and POPULATION FREQUENCY DISTRIBUTION OF FILIPINOS, by REGION and SELECTED AGE GROUPS, 1970

| | U.S. | N.E. | N.C. | S. | W. |
|---|---|---|---|---|---|
| A. Enrollment Rates | | | | | |
| 25-34 years | 6.9 | 8.2 | 9.0 | 5.8 | 6.4 |
| 18-24 years | 25.2 | 20.4 | 21.4 | 15.0 | 28.1 |
| Male | 27.5 | 26.4 | 30.2 | 11.6 | 30.8 |
| Female | 23.2 | 17.4 | 17.7 | 21.1 | 25.5 |
| 14-17 years | 92.8 | 88.8 | 92.9 | 92.5 | 92.9 |
| Male | 92.9 | 98.4 | 88.8 | 90.6 | 92.9 |
| Female | 92.6 | 82.5 | 97.3 | 94.8 | 92.9 |
| 25 years and over: | | | | | |
| Median school years completed | 12.2 | 15.5 | 16.5 | 12.8 | 11.4 |
| Percent high school graduates | 54.7 | 72.7 | 81.7 | 67.5 | 47.4 |
| B. Population Distribution (in %) | | | | | |
| 25-34 years | 18.91 | 2.82 | 2.33 | 2.37 | 11.38 |
| 18-24 years | 11.75 | 1.26 | 1.01 | 1.32 | 8.17 |
| 14-17 years | 6.37 | 0.27 | 0.23 | 0.28 | 5.59 |
| 14-34 years | 37.03 | 4.35 | 3.57 | 3.97 | 25.14 |
| All Ages | 100.00 | 8.98 | 8.10 | 8.69 | 74.23 |
| C. Enrollment Rates: Urban Areas Only | | | | | |
| 25-34 years | 7.1 | 7.9 | 9.1 | 6.0 | 6.8 |
| 18-24 years | | | | | |
| Male | 28.6 | 30.0 | 29.3 | 12.5 | 31.9 |
| Female | 23.5 | 17.9 | 17.8 | 21.8 | 26.0 |
| 14-17 years | | | | | |
| Male | 92.9 | 98.2 | 90.3 | 91.6 | 92.9 |
| Female | 92.3 | 80.9 | 97.2 | 94.4 | 92.8 |
| 25 years and over: | | | | | |
| Median school years completed | 12.4 | 15.7 | 16.5 | 12.8 | 12.1 |
| Percent high school graduates | 58.9 | 73.1 | 82.6 | 68.4 | 52.0 |
| D. Enrollment Rates: Rural Non-Farm only | | | | | |
| 25-34 years | 4.6 | 14.3 | 6.2 | 2.8 | 3.8 |
| 18-24 years | | | | | |
| Male | 21.1 | 8.0 | .... | 5.3 | 24.8 |
| Female | 19.6 | 9.3 | 16.8 | 14.6 | 21.1 |
| 14-17 years | | | | | |
| Male | 92.8 | .... | .... | .... | 93.1 |
| Female | 93.2 | .... | .... | .... | 92.8 |
| 25 years and over: | | | | | |
| Median school years completed | 8.0 | 12.9 | 12.9 | 12.4 | 7.1 |
| Percent high school graduates | 31.9 | 66.6 | 68.7 | 58.9 | 27.2 |

Source of Basic Data: U.S. Dept. of Commerce, 1970 Census of Population Subject Reports, PC(2)-1G

TABLE A-3: INDIVIDUAL INCOME, EDUCATION, AND RELATED SOCIO-ECONOMIC VARIABLES BY AGE BRACKETS, FILIPINOS, 1970

| | 14-15 | | 16-19 | | 20-24 | | 25-34 | | 35-44 | | 45-64 | | 65+ | | Total 16 yrs. and over | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| 1. Mean Income | $895 | $944 | $1382 | $1271 | $3439 | $3187 | $6352 | $4704 | $8525 | $4754 | $6418 | $4187 | $3228 | $1701 | $5710 | $4013 |
| 2. Median Income | 660 | 639 | 936 | 809 | 2857 | 2997 | 5897 | 4496 | 6968 | 4110 | 5973 | 3558 | 2528 | 1130 | 5019 | 3513 |
| 3. Median school years completed | 8.5 | 8.6 | 11.0 | 11.1 | 12.7 | 13.0 | 13.1 | 14.4 | 12.7 | 12.6 | 7.9 | 10.1 | 5.4 | 5.9 | 11.9 | 12.6 |
| 4. % high school graduates | 0.1 | 0.1 | 27.4 | 31.9 | 74.2 | 81.5 | 78.8 | 78.2 | 68.2 | 64.9 | 26.5 | 41.8 | 17.3 | 16.6 | 49.4 | 63.6 |
| 5. % professional, technical, kindred workers; managers & administrators except farm | 5.9 | 6.6 | 3.7 | 6.3 | 16.9 | 30.7 | 39.1 | 45.3 | 33.7 | 30.0 | 8.3 | 21.5 | 6.6 | 24.3 | 21.2 | 33.5 |
| 6. % private wage and salary workers | 83.9 | 83.9 | 86.7 | 86.7 | 82.8 | 82.8 | 81.1 | 81.1 | 74.3 | 74.3 | 73.9 | 73.9 | 78.3 | 78.3 | 78.1 | 78.1 |
| 7. % self-employed and unpaid family workers | 5.4 | 5.4 | 0.7 | 0.7 | 1.0 | 1.0 | 1.8 | 1.8 | 4.4 | 4.4 | 5.7 | 5.7 | 9.2 | 9.2 | 3.6 | 3.6 |
| 8. % not in labor force | 90.6 | 94.9 | 56.1 | 63.4 | 13.3 | 37.4 | 5.6 | 39.8 | 5.1 | 37.6 | 12.9 | 47.8 | 67.9 | 88.6 | 21.0 | 44.8 |
| 9. % worked 26 weeks or less | 78.6 | 84.2 | 67.1 | 74.2 | 19.8 | 31.7 | 8.2 | 22.6 | 6.0 | 19.4 | 7.2 | 17.8 | 30.9 | 36.0 | 14.0 | 26.7 |
| 10. % single | 98.5 | 98.9 | 94.3 | 87.8 | 67.8 | 48.6 | 24.1 | 22.3 | 9.9 | 10.1 | 17.6 | 7.8 | 28.0 | 9.8 | 31.0 | 27.5 |
| 11. % lived in same house in 1965 | 52.1 | 52.1 | 45.2 | 45.2 | 48.1 | 48.1 | 13.4 | 13.4 | 29.9 | 29.9 | 55.0 | 55.0 | 59.6 | 59.6 | 33.5 | 33.5 |
| 12. #2/#3 (in %) | 77.6 | 74.3 | 85.1 | 72.9 | 225.0 | 230.5 | 450.2 | 312.2 | 548.7 | 326.2 | 756.1 | 352.3 | 468.1 | 191.6 | 421.8 | 278.8 |

TABLE A-4: INDIVIDUAL INCOME, EDUCATION, AND RELATED SOCIO-ECONOMIC VARIABLES BY AGE BRACKETS, CHINESE, 1970

| | 14-15 | | 16-19 | | 20-24 | | 25-34 | | 35-44 | | 45-64 | | 65+ | | Total 16 yrs. and over | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| 1. Mean Income | $669 | $722 | $1277 | $1154 | $2650 | $2486 | $7458 | $4472 | $9951 | $4493 | $8842 | $4294 | $3348 | $1918 | $6877 | $3512 |
| 2. Median Income | 644 | 630 | 916 | 856 | 1985 | 1889 | 6887 | 4090 | 8643 | 3988 | 6904 | 3464 | 1943 | 1188 | 5223 | 2686 |
| 3. Median school years completed | 8.6 | 8.7 | 11.5 | 11.6 | 14.0 | 13.8 | 16.1 | 13.6 | 12.9 | 12.3 | 11.5 | 9.5 | 6.7 | 4.4 | 12.6 | 12.3 |
| 4. % high school graduates | 0.3 | 0.2 | 41.9 | 43.5 | 89.1 | 85.4 | 85.3 | 78.1 | 69.2 | 59.3 | 47.9 | 42.0 | 21.3 | 15.5 | 62.2 | 58.3 |
| 5. % professional, technical, kindred workers; managers & administrators except farm | 4.3 | 5.9 | 6.3 | 4.3 | 26.4 | 19.8 | 56.3 | 39.9 | 45.5 | 21.9 | 35.4 | 18.6 | 29.7 | 15.2 | 40.4 | 23.2 |
| 6. % private wage and salary workers | 80.2 | 80.2 | 79.9 | 79.9 | 74.8 | 74.8 | 71.4 | 71.4 | 68.9 | 68.9 | 65.5 | 65.5 | 88.0 | 88.0 | 69.9 | 69.9 |
| 7. % self-employed and unpaid family workers | 13.9 | 13.9 | 5.5 | 5.5 | 2.8 | 2.8 | 5.1 | 5.1 | 12.5 | 12.5 | 18.4 | 18.4 | 25.0 | 25.0 | 11.1 | 11.1 |
| 8. % not in labor force | 87.4 | 92.9 | 62.5 | 65.5 | 42.0 | 44.3 | 13.3 | 49.7 | 4.5 | 40.9 | 12.2 | 42.6 | 75.2 | 88.0 | 26.8 | 50.5 |
| 9. % worked 26 weeks or less | 61.5 | 67.2 | 61.9 | 64.8 | 43.5 | 41.1 | 10.9 | 23.5 | 4.3 | 16.5 | 6.2 | 13.7 | 21.3 | 27.1 | 17.0 | 27.6 |
| 10. % single | 99.3 | 99.4 | 98.0 | 95.3 | 88.4 | 68.2 | 35.7 | 14.6 | 12.2 | 5.3 | 8.9 | 4.3 | 12.1 | 5.3 | 36.7 | 27.7 |
| 11. % lived in same house in 1965 | 58.1 | 58.1 | 49.9 | 49.9 | 29.2 | 29.2 | 21.4 | 21.4 | 44.8 | 44.8 | 60.4 | 60.4 | 60.7 | 60.7 | 43.2 | 43.2 |
| 12. #2/#3 (in %) | 74.9 | 72.4 | 79.7 | 73.8 | 141.8 | 136.9 | 427.8 | 300.7 | 670.0 | 324.2 | 600.3 | 364.6 | 290.0 | 270.0 | 414.5 | 218.4 |

TABLE A-5: INDIVIDUAL INCOME, EDUCATION, AND RELATED SOCIO-ECONOMIC VARIABLES BY AGE BRACKETS, JAPANESE, 1970

| | 14-15 | | 16-19 | | 20-24 | | 25-34 | | 35-44 | | 45-64 | | 65+ | | Total 16 yrs. and over | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| 1. Mean Income | $741 | $929 | $1354 | $1020 | $3345 | $2953 | $8382 | $4798 | $11261 | $4567 | $10670 | $4623 | $3984 | $1928 | $8183 | $3819 |
| 2. Median Income | 612 | 664 | 950 | 770 | 2639 | 2448 | 8316 | 4893 | 10515 | 4189 | 9344 | 4192 | 2482 | 1312 | 7574 | 3236 |
| 3. Median school years completed | 8.7 | 8.7 | 11.4 | 11.5 | 13.9 | 14.0 | 14.6 | 12.9 | 12.9 | 12.5 | 12.3 | 12.2 | 8.5 | 8.3 | 12.6 | 12.4 |
| 4. % high school graduates | 0.1 | 0.2 | 37.8 | 39.7 | 93.2 | 93.4 | 92.6 | 86.6 | 85.8 | 78.8 | 63.2 | 58.2 | 27.3 | 25.4 | 69.9 | 67.4 |
| 5. % professional, technical, kindred workers; managers & administrators except farm | 1.4 | 4.3 | 4.1 | 5.2 | 21.1 | 22.8 | 46.3 | 32.6 | 42.9 | 18.1 | 27.4 | 15.7 | 19.4 | 11.2 | 33.2 | 19.7 |
| 6. % private wage and salary workers | 88.9 | 88.9 | 86.9 | 86.9 | 73.9 | 73.9 | 69.7 | 69.7 | 67.6 | 67.6 | 64.7 | 64.7 | 63.4 | 63.4 | 68.5 | 68.5 |
| 7. % self-employed and unpaid family workers | 6.4 | 6.4 | 2.5 | 2.5 | 2.3 | 2.3 | 4.9 | 4.9 | 9.9 | 9.9 | 17.4 | 17.4 | 30.3 | 30.3 | 11.1 | 11.1 |
| 8. % not in labor force | 89.2 | 94.9 | 59.0 | 67.3 | 27.3 | 36.8 | 8.5 | 51.1 | 3.1 | 47.3 | 6.5 | 37.3 | 70.7 | 88.0 | 20.7 | 50.6 |
| 9. % worked 26 weeks or less | 69.3 | 81.2 | 66.6 | 71.5 | 33.1 | 35.0 | 7.4 | 20.5 | 1.8 | 16.9 | 2.2 | 10.5 | 22.6 | 40.5 | 12.7 | 22.7 |
| 10. % single | 99.3 | 98.6 | 97.9 | 95.0 | 81.1 | 62.4 | 35.1 | 14.2 | 14.1 | 5.7 | 9.2 | 6.7 | 7.2 | 4.3 | 31.9 | 20.2 |
| 11. % lived in same house in 1965 | 70.2 | 70.2 | 63.5 | 63.5 | 34.8 | 34.8 | 24.7 | 24.7 | 50.4 | 50.4 | 73.6 | 73.6 | 75.2 | 75.2 | 54.4 | 54.4 |
| 12. #2/#3 (in %) | 70.3 | 76.3 | 83.3 | 67.0 | 189.9 | 174.9 | 569.6 | 379.3 | 815.1 | 335.1 | 759.7 | 343.6 | 292.0 | 158.1 | 601.1 | 261.0 |

Table A-6: Multivariate Regression Models of Income, Filipinos, Chinese, and Japanese, 1970

Notation:

Dependent Variables

LMEDINCF : logarithm of median incomes, Filipinos
LMEANYF : logarithm of mean incomes, Filipinos
LMEDINCC : logarithm of median incomes, Chinese
LMEANYC : logarithm of mean incomes, Chinese
LMEDINCJ : logarithm of median incomes, Japanese
LMEANYJ : logarithm of mean incomes, Japanese

Independent Variables (last letters X = ethnic group F, C, J as above)

MEDSCHX : median schoolyears completed, ethnic group X
AGEX, AGESQX : age and age squared taken at midpoint of the age bracket, and 70 for age bracket 65+
SEXDUMMY : summy variable for sex = 1 if male, =0 for female
%WTSWLX : percentage in the age bracket who worked twenty-six weeks or less during the year, ethnic group X

Tabular F-ratio values for 5 and 8 degrees of freedom

1.66 at 25% Pr
2.73 at 10% Pr
3.69 at 5% Pr
6.63 at 1% Pr

Tabular Student's t-value for 8 degrees of freedom

0.706 at 25% Pr
1.397 at 10% Pr
1.860 at 5% Pr
2.896 at 1% Pr

REGRESSION ANALYSIS**********

DEPENDENT VARIABLE IS LMEDINCF

| VARIABLE | COEFFICIENT | STANDARD ERROR OF COEFFICIENT | STUDENT'S T | D.F. |
|---|---|---|---|---|
| INTERCEPT | 7.43662 | 1.4783 | 5.03052 | 8 |
| MEDSCHF | .279011E-1 | .581449E-1 | .479855 | 8 |
| AGEF | .046828 | .352465E-1 | 1.32859 | 8 |
| AGESQF | -.528126E-3 | .399083E-3 | -1.32351 | 8 |
| SEXDUMMY | .115403 | .156216 | .738745 | 8 |
| WTSWLF | -.230202E-1 | .770364E-2 | -2.98823 | 8 |

MULTIPLE CORRELATION COEFFICIENT (R) IS .980431

0 (ADJUSTED R= .968 )

COEFFICIENT OF DETERMINATION (R 2) IS .961245

STANDARD ERROR OF ESTIMATE IS .21713

(ADJUSTED S.E. OF E.= .27688 )

ANALYSIS OF VARIANCE**********

| SOURCE OF VARIATION | SUM OF SQUARES | D.F. | MEAN SQUARE |
|---|---|---|---|
| REGRESSION | 9.35485 | 5 | 1.87097 |
| RESIDUAL | .377165 | 8 | .471456E-1 |
| TOTAL | 9.73202 | 13 | |

F RATIO IS 39.685

REGRESSION ANALYSIS**********

DEPENDENT VARIABLE IS LMEANYF

| VARIABLE | COEFFICIENT | STANDARD ERROR OF COEFFICIENT | STUDENT'S T | D.F. |
|---|---|---|---|---|
| INTERCEPT | 11.1401 | 4.17777 | 2.66653 | 8 |
| MEDSCHF | -.153816 | .164321 | -.936071 | 8 |
| AGEF | .116865E-1 | .996088E-1 | .117324 | 8 |
| AGESQF | -.417397E-3 | .958269E-3 | -.435574 | 8 |
| SEXDUMMY | -.348979 | .441475 | -.790485 | 8 |
| SWTSWLF | -.257947E-1 | .021771 | -1.23075 | 8 |

MULTIPLE CORRELATION COEFFICIENT (R) IS .730501
0 (ADJUSTED R= .492039 )

COEFFICIENT OF DETERMINATION (R^2) IS .533631

STANDARD ERROR OF ESTIMATE IS .613624
(ADJUSTED S.E. OF E.= .78222 )

ANALYSIS OF VARIANCE**********

| SOURCE OF VARIATION | SUM OF SQUARES | D.F. | MEAN SQUARE |
|---|---|---|---|
| REGRESSION | 3.44672 | 5 | .689345 |
| RESIDUAL | 3.01227 | 8 | .376534 |
| TOTAL | 6.459 | 13 | |

F RATIO IS 1.83076

REGRESSION ANALYSIS**********

DEPENDENT. VARIABLE IS LMEANYC

| VARIABLE | COEFFICIENT | STANDARD ERROR OF COEFFICIENT | STUDENT'S T | D.F. |
|---|---|---|---|---|
| INTERCEPT | 5.72539 | 1.12005 | 5.11172 | 8 |
| MEDSCHC | .120233 | .290279E-1 | 4.142 | 8 |
| AGEC | .621157E-1 | .333335E-1 | 1.94584 | 8 |
| AGESQC | -.511801E-3 | .319214E-3 | -1.60935 | 8 |
| SEXDUMYC | .144935 | .879035E-1 | 1.6045 | 8 |
| SWTSWLC | -.167636E-1 | .803047E-2 | -2.0875 | 8 |

MULTIPLE CORRELATION COEFFICIENT (R) IS .991828
0 (ADJUSTED R= .986686 )
COEFFICIENT OF DETERMINATION (R^2) IS .983723

STANDARD ERROR OF ESTIMATE IS .142615
(ADJUSTED S.E. OF E.= .131739 )

ANALYSIS OF VARIANCE**********

| SOURCE OF VARIATION | SUM OF SQUARES | D.F. | MEAN SQUARE |
|---|---|---|---|
| REGRESSION | 9.83341 | 5 | 1.96668 |
| RESIDUAL | .162711 | 8 | .203389E-1 |
| TOTAL | 9.99612 | 13 | |

F RATIO IS 96.6957

REGRESSION ANALYSIS**********

DEPENDENT VARIABLE IS LMEDINCC

| VARIABLE | COEFFICIENT | STANDARD ERROR OF COEFFICIENT | STUDENT'S T | D.F. |
|---|---|---|---|---|
| INTERCEPT | 7.53387 | .950086 | 7.92957 | 8 |
| EDSCHC | .700479E-1 | .246220E-1 | 2.84483 | 8 |
| AGEC | .262798E-1 | .285297E-1 | .921137 | 8 |
| AGESQC | -.328459E-3 | .269926E-3 | -1.21695 | 8 |
| SEXDUMYC | .987122E-1 | .745559E-1 | 1.324 | 8 |
| %WTSWLC | -.317416E-1 | .681187E-2 | -4.65974 | 8 |

MULTIPLE CORRELATION COEFFICIENT (R) IS .994456
0 (ADJUSTED R= .990975 )

COEFFICIENT OF DETERMINATION (R^2) IS .988942

STANDARD ERROR OF ESTIMATE IS .120973
(ADJUSTED S.E. OF E.= .154211 )

ANALYSIS OF VARIANCE**********

| SOURCE OF VARIATION | SUM OF SQUARES | D.F. | MEAN SQUARE |
|---|---|---|---|
| REGRESSION | 10.4704 | 5 | 2.09407 |
| RESIDUAL | .117075 | 8 | .146345E-1 |
| TOTAL | 10.5874 | 13 | |

F RATIO IS 143.092

REGRESSION ANALYSIS**********

DEPENDENT VARIABLE IS LMEANYJ

| VARIABLE | COEFFICIENT | STANDARD ERROR OF COEFFICIENT | STUDENT'S T | D.F. |
|---|---|---|---|---|
| INTERCEPT | 3.07677 | 1.03647 | 4.06530 | 8 |
| MEDSCHJ | .379201E-1 | .716034E-1 | .52765 | 8 |
| EJ | .196713E-1 | .516419E-1 | .380910 | 8 |
| AGESQJ | -.212916E-3 | .500902E-3 | -.42515 | 8 |
| SEXDUMYJ | .169796 | .160217 | 1.05979 | 8 |
| SWTSWLJ | -.265907E-1 | .110697E-1 | -2.40142 | 8 |

MULTIPLE CORRELATION COEFFICIENT (R) IS .979074
C (ADJUSTED R= .955765 )
COEFFICIENT OF DETERMINATION (R^2) IS .958586

STANDARD ERROR OF ESTIMATE IS .231034
(ADJUSTED S.E. OF E.= .295559 )

ANALYSIS OF VARIANCE**********

| SOURCE OF VARIATION | SUM OF SQUARES | D.F. | MEAN SQUARE |
|---|---|---|---|
| REGRESSION | 9.96105 | 5 | 1.99221 |
| RESIDUAL | .430347 | 8 | .537934E-1 |
| TOTAL | 10.3914 | 13 | |

F RATIO IS 37.0344

REGRESSION ANALYSIS**********

DEPENDENT VARIABLE IS LMEDINCJ

| VARIABLE | COEFFICIENT | STANDARD ERROR OF COEFFICIENT | STUDENT'S T | D.F. |
|---|---|---|---|---|
| INTERCEPT | 8.90015 | 1.84681 | 4.8192 | 9 |
| MEDSCHJ | .194377E-3 | .066553 | .292375E-2 | 9 |
| AGEJ | .141539E-1 | .490111E-1 | .288803 | 9 |
| AGESQJ | -.252094E-3 | .465593E-3 | -.541447 | 9 |
| SEXDUMYJ | .781801E-1 | .148953 | .524866 | 9 |
| SWTSWLJ | -.348256E-1 | .102905E-1 | -3.38423 | 9 |

MULTIPLE CORRELATION COEFFICIENT (R) IS .935258
(ADJUSTED R= .875031 )

COEFFICIENT OF DETERMINATION (R^2) IS .870733

STANDARD ERROR OF ESTIMATE IS .215628
(ADJUSTED S.E. OF E.= .274873 )

ANALYSIS OF VARIANCE**********

| SOURCE OF VARIATION | SUM OF SQUARES | D.F. | MEAN SQUARE |
|---|---|---|---|
| REGRESSION | 12.3374 | 5 | 2.46749 |
| RESIDUAL | .371953 | 9 | .464953E-1 |
| TOTAL | 12.7094 | 13 | |

F RATIO IS 53.0696

APPENDIX B: SAMPLE QUESTIONNAIRE, A SURVEY OF EDUCATIONAL ATTITUDES AND WORK/INCOME OPPORTUNITIES PERCEPTION OF YOUNG FILIPINO AMERICANS

**Philippine FORUM of New York**

c/o Dr. F. M. Macaranas
37 King St. #4D
New York, New York 10014

Dear Interviewer:

Enclosed are the survey questionnaires and cover letters regarding the Philippine Forum project which I discussed with you sometime ago. Below are some guidelines for your consideration with respect to the conduct of the interview.

1. Potential respondents: Please concentrate efforts in locating 14-34 years old Filipino-Americans who may have
   a. dropped out of school for one reason or another;
   b. considered returning to school for higher education, either at present or at some previous time;
   c. problems regarding employment due to educational or other reasons; and
   d. other employment problems due to certain attitudes.

   Although we have initially limited our survey to the greater New York City area, please feel free to mail the questionnaires to other Filipino-Americans in the Atlantic seaboard. The major purpose for concentrating in the greater New York City area is to facilitate communication.

2. If your potential subject is under 18 years old, please explain to him/her the purpose of the project (as explained in the cover letter), the method being followed for the research (as contained in the informed consent form behind the cover letter), and the way to fill out the survey questionnaire itself*. If you need assistance in interpreting any of these, please contact me at Manhattan College, School of Business, Tel. No. (212) 548-1400 any weekday between 9:00 - 5:00, except Wednesdays; or at home, Tel. No. (212) 691-0493, week evenings, 7:00 - 11:00, and Wednesdays, 9:00 am - 11:00 pm.
   (* Use the sample statement in Part II as an example to your respondent.)
3. Please emphasize to your potential respondents the CONFIDENTIALITY of their response sheets. Ask them to seal the survey responses separately from the signed informed consent forms before handing over to you the completed questionnaires. The confidentiality aspect must be underscored because some of the questions may be deemed too personal by the respondents; please note that their names are in no way identified anywhere in the questionnaire.

4. Please appeal to the community spirit of the respondents in asking them some half an hour of their time to complete the questionnaires. The Filipino-American community cannot afford to lag behind other ethnic groups in their adaptation/assimilation into the mainstream of American economic and social life.

Thank you very much for your help. I look forward to hearing from you soon. Likewise, I will try to get in touch with you periodically so that we can beat our deadline with ease.

Sincerely yours,
Federico M. Macaranas
Federico M. Macaranas

**Philippine FORUM of New York**

c/o Dr. F. M. Macaranas
37 King St., #4D
New York, New York 10014

October 26, 1977

Dear fellow Filipino-American:

We would like to solicit your help concerning a survey that the Philippine Forum of New York is conducting. It is aimed at uplifting the general welfare of the Filipino-American community here in the East Coast and throughout the country as well.

The present survey is an outgrowth of the finding of two of our speakers at the seminar on "The Filipino Experience in the U.S." held at The Asia House last March, 1977. The seminar highlighted the alarmingly low enrollment of young Filipino-Americans in higher education compared with other Asian-Americans and the U.S. community in general.

For example, according to the 1970 US Population Census, the national average enrollment rates in the 18 - 24 years bracket are 37% and 27% for males and females respectively, while these are only 28% and 23% for Filipinos similarly classified. These figures stand out rather strongly when compared to the enrollment rates of Chinese (71% for males and 58% for females) and Japanese (56% and 48% respectively) in the same age group.

Your participation in this survey will go a long way towards making a scientific study of this problem. We wish to ask of you a half hour of your time to answer the enclosed questionnaire. We wish to request further that you ask your relatives and friends in turn to answer the questionnaire too; copies are available at several offices of Filipino-American organizations in your area or you may request for some at the above address.

Please return completed survey forms using the enclosed, self-addressed and stamped envelope or to the interviewer/organization from whom you got this letter. For your kind support, may I extend my warmest "Mabuhay!" and "Maraming salamat po!"

Sincerely yours,

Federico M. Macaranas

Federico M. Macaranas, Ph.D.
Scholar-in-Residence and Principal Investigator
Department of Economics
Manhattan College
Riverdale, New York 10471

STATEMENT OF INFORMED CONSENT: SURVEY OF EDUCATIONAL ATTITUDES AND WORK/INCOME OPPORTUNITIES PERCEPTION OF YOUNG FILIPINO-AMERICANS (SPONSORED BY THE PHILIPPINE FORUM OF NEW YORK, INC.)

The undersigned hereby acknowledge(s) completely voluntary participation in the survey abovementioned being conducted by the Philippine Forum of New York, Inc. from October, 1977 to January 1978 based on the following information:

1. The research is being undertaken to identify the major reasons for the low enrollment of young Filipino-Americans in higher education and their perception of work and income opportunities here in the United States. From this, possible solutions to the problems identified may be suggested to the community organizations and appropriate government agencies.

2. The research is being undertaken for academic purposes and will not involve any monetary payment to the respondents; the expected benefits to individual respondents will be indirect since the research results will have more of a social rather than personal significance. No risk to the individual respondent is likewise anticipated.

3. Respondents aged 14 to 18 will need the additional consent of a parent or guardian.

4. The information gathered from the survey will be treated with utmost confidence and will be used purely for statistical purposes. Safeguards to protect the identity of the respondent will be strictly followed throughout the research.

a. Names of respondents are suppressed in the questionnaire. This informed consent form will be immediately separated from the questionnaire in a manner that will not identify the respondent.

b. Answers to the questionnaires will be recorded in data cards without identifying the name or address of the respondent. Both original survey sheets and cards will be kept in a locked drawer which will be accessible only to the Scholar-in-Residence and one research assistant directly responsible to him.

c. No individual case will be discussed in the research write-up in such a way as to identify any single person.

d. The original survey sheets will be destroyed by March 30, 1978; the data cards will be stored in secured cabinets until December 30, 1978 for possible use in further research. Only the Scholar-in-Residence will have access to these cards by March 30, 1978.

5. The Scholar-in-Residence or the interviewer will be willing to answer any question about the research project, the survey questionnaire, or any such pertinent matter that may be raised by the respondent and/or (in the case of those under 18 years of age) their parents or guardians.

6. Any respondent may withdraw from the research at anytime by contacting Dr. Federico M. Macaranas, Scholar-in-Residence for the research project, at the Economics Department, Manhattan College, 242nd Street and Manhattan College Parkway, Riverdale, New York 10471; Telephone No. (212) 548-1400, Ext. 135. All withdrawal requests will be granted except when the respondent's survey sheets have been entered in cards and processed such that identification of individual replies is no longer feasible.

SIGNATURE OF RESPONDENT AND DATE: _____

SIGNATURE OF PARENT/GUARDIAN (for respondents under 18 years): _____

_____

A SURVEY OF EDUCATIONAL ATTITUDES AND WORK/INCOME OPPORTUNITIES PERCEPTION OF YOUNG FILIPINO-AMERICANS. WINTER 1977 - 78

PART I: SURVEY QUESTIONNAIRE. Please encircle the word/phrase that best fits your attitude or feeling towards the given statement. For example,

SAMPLE STATEMENTS:

Example 1. I am interested in studying the history of the Philippines.

Strongly Agree (Agree) Uncertain Disagree Strongly Disagree

Example 2. Schooling in the Philippines is more difficult than sudying in the U.S.

(Not Applicable) Strongly Agree etc.....

Note that in Example 1, there is no "Not Applicable" choice because you either have to agree or disagree while in Example 2, you may have been born in the U.S. and you do not have any knowledge of schooling conditions in the Philippines.

---

1. I have attained the level of formal education I want for myself.

Strongly Agree Agree Uncertain Disagree Strongly Disagree

2. I can earn more in later years if I study now.

Strongly Agree Agree Uncertain Disagree Strongly Disagree

3. I can easily get promoted in my present work if I continue my studies now.

Not Applicable Strongly Agree Agree Uncertain Disagree Strongly Disagree

4. Most of my friends have changed their fields of education to earn better.

Not Applicable Strongly Agree Agree Uncertain Disagree Strongly Disagree

5. Most of my friends are still in school or have finished a college degree.

Not Applicable Strongly Agree Agree Uncertain Disagree Strongly Disagree

6. My immediate family members feel that I need to have a solid education to get a better job here in the United States.

Not Applicable Strongly Agree Agree Uncertain Disagree Strongly Disagree

7. I am willing to work in a field different from that for which my formal education has prepared me.

| Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|

8. Additional formal education will cost me more compared to the increase in my income because of it.

| Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|

9. If it were not for the cost of schooling, I ought to change my field of education now so that I can earn better later.

| Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|

10. I can get some financial support from relatives if I really want to further my education.

| Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|

11. I can get some financial support ( scholarship or loans ) from private American institutions if I want to continue my studies.

| Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|

12. I can get some support from government agencies if I really want to study further.

| Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|

13. I ought to shift careers in order to insure a better income in the future.

| Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|

14. Going to school will improve my social life, like meeting new friends.

| Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|

15. Most firms in my field of work offer training within the company.

| Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|

16. I can get promoted without going to school again if I study by myself.

| Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|

17. One way of overcoming discrimination against minority groups is through higher education of the minorities themselves.

Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

18. I feel there is job discrimination here in the United States based on one's ethnic origin.

Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

19. I feel there is job discrimination here in the United States based on one's sex.

Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

20. The more a person is discriminated against in his or her work, the greater ought to be his or her motivation to get promoted.

Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

21. I feel I am getting paid less for the kind of work I do compared to white Americans.

Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

22. Given the same income and position, I prefer to work in a firm where there are more non-whites or other ethnic minorities.

Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

23. A Filipino who speaks English the way an American does will find it easier to get promoted in jobs involving contact with all sorts of people.

Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

24. A Filipino who speaks English the way an American does will find it easier to get promoted in jobs without heavy contact with all sorts of people.

Syrongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

25. I ought to be given more responsibilities at work right now.

Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

26. I am satisfied with my performance at work.

| Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|

27. I believe my immediate supervisor at work is satisfied with my performance.

| Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|

28. I would like to have more responsibilities in my present job even if it didn't pay me more.

| Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|

29. Fringe benefits are as important as salary considerations in any job.

| Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|

30. I have achieved the level of income I want myself at my age.

| Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|

31. I expected to be receiving more income at this point in my stay here in the United States.

| Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|

32. If a person is underpaid, he or she must work extra hours rather than complain to the boss.

| Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|

33. If I had sufficient money of my own, I would start my own business because I know I can earn more.

| Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|

34. If I had sufficient money of my own, I would start my own business because I know I would be my own boss.

| Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|

35. I prefer to earn less but be my own boss.

| Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|

36. One can easily get promoted in a job here in the United States provided he or she knows ( or is personally close to ) the correct people.

Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

37. I have sufficient close friends, relatives, etc., who can help me get a good job or be promoted to a higher position.

Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

38. I am healthy enough to go to school if I want to, or to accept a job promotion with more responsibilities if offered to me.

Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

39. I believe I can get a better job if I moved to another state right now.

Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

40. I am willing to move to another state to accept a higher-paying job in the same field that promises little promotion later.

Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

41. My education in the Philippines prepared me adequately for the job market here in the United States.

Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

42. My education here in the United States prepared me adequately for the job market here in the United States.

Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

43. To get a good job here in the United States, one must have the correct educational background.

Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

44. To get a good job here in the United States, it is necessary for someone to earn a degree from a United States insitution of higher learning.

Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

45. Even without a US-earned degree, any person can get a good job here if he or she has some solid work experience in the Philippines.

Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

46. Even without a US-earned degree, any person can get a good job here if he or she has some solid work experience here in the United States.

Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

47. I was forced by other people to study a field of education I was not too interested in.

Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

48. I will go to school more to widen my general knowledge rather than to gain skills for a job.

Not Applicable | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree

PART II: BASIC INFORMATION

1. Age ( if below 18 years old, please attach parental/guardian's consent form ) :_____

2. Sex: Male_____ Female_____

3. Current address:_____

4. a) Place of birth:_____
   b) Area where you spent childhood( before 14 years old ):
   Predominantly urban_____ Predominantly rural_____
   c) Year when you first came to the U.S. for prolonged stay:_____
   d) Number of years of prolonged absence from the U.S. from the above time:_____
   e) Country of longest residence:_____

5. a) Marital status: Married___ Single___ Widowed___ Divorced___
   b) Number of children:_____ Ages:_____
   c) How are living with you at present?_____
   d) Number of dependents ( include children, parents, brothers, etc. you claim as dependents in your income tax form ):_____
   e) Wife/husband also working?_____ Total family income before taxes per year as contained in 1976 income tax returns:_____

6.

| Educational Attainment | Highest Degree Attained | When Attained | Where Attained |
|---|---|---|---|
| Your own | | | |
| Your wife/husband | | | |
| Your father | | | |
| Your mother | | | |
| Brother/sister 1 | | | |
| Brother/sister 2 | | | |
| Brother/sister 3 | | | |
| Brother/sister 4 | | | |
| Brother/sister 5 | | | |
| Brother/sister 6 | | | |

7. Are you still in school?_____ If "Yes", please check the following accordingly:
   a) Full time____ part time____
   b) Private___ public_____
   c) Junior high___ senior high___ vocational institute_____ community college____ college____ university___ others(please specify)_____

8. If you are still in school, please cite the percentage of your source of funds (for tuition, matriculation, general, miscellaneous fees, books, transportation expenses):

(see next page please)

8. (cont'd.)

Percentage shouldered by each
___Own income and own savings
___Parents, brothers, sisters, other relatives
___Scholarships
___Company-paid
___Loans (bank, government, school, others - please specify:_____)

9. Do you have a job now?____ If "Yes", please check the following accordingly:

a) ___Under 15 hours per week
___15-34 hours per week
___35-40 hours per week
___41 hours and above

b) ___Less than $50 average take-home pay per week
___$51-$100 average take-home pay per week
___$101-$150 average take-home pay per week
___$151-$200 average take-home pay per week
___$201-$250 average take-home pay per week
___$251-$300 average take-home pay per week
___$301-$400 average take-home pay per week
___$400 and above average take-home pay per week

c) ___Permanent job
___Temporary job

d) Classify your work according to the following grouping (check one):

___Professional, technical
___Managerial, administrative
___Sales worker
___Clerical worker
___Craftsman, foreman
___Operative, including transport
___Laborer, except farm
___Farmer and farm manager
___Farm laborer and foreman
___Service worker, except private homes
___Private household worker

e) Classify the nature of the industry in which your firm operates (check one):

___Agriculture, forestry, fishing
___Mining
___Construction
___Manufacturing durable goods
___Manufacturing non-durable goods
___Transportation, communication, other public utilities
___Wholesale and retail trade
___Finance, insurance, real estate
___Business services and repair services
___Entertainment and recreational services
___Professional and related services
___Public administration (Federal, state or local government)
___Other industry (please specify):_____

10. Previous employment record: Please write your employment history starting with the FIRST job you had (even in the Philippines). For "Work group" and "Industry" please use the classifications in 9-d and 9-e above. Use pesos or dollars in estimated annual salary according to the currency you received.

| Years | Part or Full time | Town/City/Province/State | Work Group as in (9d) | Industry as in (9e) | Est. annual salary |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

11. a) Membership in organizations now (community, professional, etc.):

_____

_____

_____

_____

b) Average number of hours devoted per month to these organizations:

_____

c) Do you consider yourself an active member? Yes___ No___

# APPENDIX C: SUPPORTING TABLES FOR PART II: A MICRO PROFILE

Table C-1: Summary Statistics, Indices of Educational Attitudes and Work/Income Opportunities Perception of Young Filipino Americans

| VARIABLE | MEAN | STD. DEV | STD.ERROR | MAXIMUM | MINIMUM | RANGE |
|---|---|---|---|---|---|---|
| EDMOTIV | 3.844 | 0.757 | 0.106 | 5.00 | 1.67 | 3.33 |
| PPRESS | 4.206 | 0.687 | 0.096 | 5.00 | 2.50 | 2.50 |
| FINL | 3.126 | 0.765 | 0.107 | 4.50 | 0.00 | 4.50 |
| NON-INC | 3.225 | 0.737 | 0.103 | 5.00 | 1.50 | 3.50 |
| DISCEXP | 3.651 | 0.767 | 0.107 | 5.00 | 2.00 | 3.00 |
| OVERDISC | 3.980 | 0.916 | 0.128 | 5.00 | 0.00 | 5.00 |
| JOBSAT | 3.520 | 1.425 | 0.199 | 5.00 | 0.00 | 5.00 |
| DESHIY | 3.127 | 1.348 | 0.189 | 5.00 | 0.00 | 5.00 |
| OTHERY | 3.127 | 0.948 | 0.133 | 5.00 | 0.00 | 5.00 |
| PATRON | 3.098 | 0.819 | 0.115 | 5.00 | 1.00 | 4.00 |
| GEOGMOB | 2.510 | 1.138 | 0.159 | 4.50 | 0.00 | 4.50 |
| NEWFIELD | 3.114 | 0.641 | 0.090 | 5.00 | 1.60 | 3.40 |
| JOBEXP | 3.579 | 0.703 | 0.098 | 5.00 | 1.50 | 3.50 |
| EFFIC | 3.632 | 0.513 | 0.072 | 4.67 | 2.50 | 2.17 |

Notation: See text, pp. 21-22.

Table C-2: Stepwise Regression Results, EDMOTIV on Other Indices

DEPENDENT VARIABLE IS EDMOTIV

| VARIABLE | REGRESSION COEFFICIENT | STANDARD ERROR OF COEFFICIENT | COMPUTED VALUE OF STUDENT'S T | BETA COEFFICIENT |
|---|---|---|---|---|
| DISCEXP | 0.265 | 0.167 | 1.586 | 0.268 |
| JOBEXP | -0.146 | 0.169 | -0.863 | -0.135 |
| OTHERY | 0.190 | 0.130 | 1.458 | 0.238 |
| EFFIC | -0.273 | 0.264 | -1.035 | -0.185 |
| FINL | -0.230 | 0.162 | -1.421 | -0.232 |
| DESHIY | -0.068 | 0.105 | -0.644 | -0.121 |
| PATRON | -0.125 | 0.147 | -0.850 | -0.135 |
| NEWFIELD | 0.098 | 0.213 | 0.462 | 0.083 |
| NON-INC | 0.085 | 0.186 | 0.455 | 0.083 |
| OVERDISC | 0.054 | 0.130 | 0.415 | 0.065 |
| PPRESS | 0.065 | 0.188 | 0.353 | 0.060 |
| GEOGMOB | 0.033 | 0.109 | 0.304 | 0.050 |
| JOBSAT | 0.001 | 0.113 | 0.013 | 0.003 |

INTERCEPT... 3.95094

Notation: See text, pp. 21-22.

Table C-3: Multivariate Regression Results, EDMOTIV on Demographic Variables

REGRESSION ANALYSIS**********

DEPENDENT VARIABLE IS EDMOT

| VARIABLE | COEFFICIENT | STANDARD ERROR OF COEFFICIENT | STUDENT'S T | D.F. |
|---|---|---|---|---|
| INTERCEPT | 4.82415 | 1.28167 | 3.76395 | 34 |
| AGE | -.465727E-1 | .277218E-1 | -1.68361 | 34 |
| SEX | .132638 | .309711 | .428264 | 34 |
| BIRTHPLA | -.473433 | .633507 | -.74732 | 34 |
| RUR-URB | -.122226 | .319755 | -.38225 | 34 |
| CSTAT | .465991 | .416016 | 1.12013 | 34 |
| INSCHL | -.854997E-1 | .355617 | -.240426 | 34 |
| WJOB | -.267684 | .383524 | -.697959 | 34 |

MULTIPLE CORRELATION COEFFICIENT (R) IS .465045

0 (ADJUSTED R= .23433 )

COEFFICIENT OF DETERMINATION (R^2) IS .216267

STANDARD ERROR OF ESTIMATE IS .809825

(ADJUSTED S.E. OF E.= .88929 )

ANALYSIS OF VARIANCE**********

| SOURCE OF VARIATION | SUM OF SQUARES | D.F. | MEAN SQUARE |
|---|---|---|---|
| REGRESSION | 6.15296 | 7 | .878994 |
| RESIDUAL | 22.2978 | 34 | .655816 |
| TOTAL | 28.4507 | 41 | |

F RATIO IS 1.34031

Notation: See text, pp.23-24.